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## ORIGINAL ARTICLES.

### THE HEART IN ANEMIA.<sup>1</sup>

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I HAVE chosen as my subject the heart in anemia, because I believe that not infrequently through the mismanagement of anemic cases organic deformity of the heart occurs, and, on the other hand, that sometimes the presence of an anemic bruit has given rise to a diagnosis of organic deformity and consequent false prognosis.

Let us consider briefly the symptoms of anemia referable to the heart, the signs to be found by physical examination, the condition of the heart as revealed by autopsy in cases of pernicious anemia and in some of the severe secondary anemias, and let us then see if we can fit the two together in such a way as to obtain a rational explanation of the symptoms and signs, and to formulate methods of treatment suitable to the conditions revealed by careful study of the case.

The symptoms of anemia referable to the heart may be said to be shortness of breath, palpitation and pain in the precordial region upon physical exertion or emotional excitement of any sort. All of these symptoms may be present in a given case, singly or together, at different periods in its history. When we make a physical examination of an anemic patient we generally note upon inspection a marked pulsation in the epigastrium and precordium, often more marked in the epigastrium; the apex-beat is generally in its normal position, or occasionally a little below and to the left; percussion gives a normal area of cardiac dulness or one slightly increased transversely; auscultation reveals a forceful beat of the apex against the chest-wall, a first sound short in duration and lacking the normal booming quality, accompanied by a loud, soft, blowing murmur; sometimes there is no first sound at all, its place being entirely taken by the murmur; the second sound is sharp and valvular in quality, the pulmonary being considerably accentuated as compared to the aortic.

With the exception of Laennec, Guttman, and,

in one case, Strümpell, all observers whose works I have been able to consult agree that the anemic heart-murmur is systolic in time, and the majority of these observers agree that it is basic in situation. According to different observers the point where this murmur is heard with greatest intensity is over the pulmonary orifice, *i. e.*, in the second left intercostal space close to the sternum, over the aortic orifice, *i. e.*, in the second right intercostal space close to the sternum, at the apex of the heart, in the tricuspid area; in fact, as Roberts says, it "has usually the position of a pulmonary systolic murmur—it may, however, be situated over the aorta or be heard at all the orifices."

Balfour, of Edinburgh, agrees with other observers that the anemic heart-murmur is systolic in time and basic in situation, but he places its point of greatest intensity, not over the aortic or pulmonary orifice, "but" (I quote from his book) "actually about one-inch-and-a-half or rather more to the left of the pulmonary area, and in the same plane immediately over the part where the appendix of the left auricle pops up from behind just to the left of the pulmonary artery."

Another clinical observation, originally made by Hanford, I believe, is worthy of note, namely, that in the large majority of cases, in which the murmur is basic in situation, its intensity is much greater when the patient lies flat on the back than in the upright position; indeed, in some cases the murmur is audible only when the patient lies down, disappearing entirely when the upright position is again assumed.

So much for the symptoms and signs of anemia that may be referred directly to the heart as their source. Let us now turn our attention to the morbid anatomy of the heart in such cases. False conclusions are liable to be drawn from too small a number of observations, and therefore, as I have seen but one autopsy in a case of pernicious anemia, and that not in my own practice, my personal experience is of no value in the matter. In this case, however, there was fatty degeneration of the myocardium with dilatation of the left ventricle.

In his masterly article on diseases of the blood in the *American Textbook of the Theory and Practice of Medicine*, Osler says, in regard to the morbid anatomy of the heart in leukemia, "the serous membranes (pericardial and endocardial) not infrequently present ecchymoses, and leukemic growths may ex-

<sup>1</sup> Read by title at the meeting of the New York State Medical Association, October 16, 1895.

ist there as well as on the peritoneum. The cavities of the heart are, as a rule, dilated and the myocardium soft; if the papillary muscles be teased out a moderate grade of fatty change is evident."

The changes in the heart in progressive pernicious anemia are stated by the same author as follows: "The heart-muscle is very pale, light yellow in color, and shows in fresh teased preparations the most intense fatty degeneration. The walls of the ventricles are remarkably lax and flaccid and the cavities contain light-colored blood."

In regard to the morbid anatomy of chlorosis the same author says: "Few cases die directly from the disease and the pathologic findings in those which have come to autopsy have been by no means constant. Rokitsky in 1846 pointed out certain instances of incurable chlorosis due to anomalies of the bloodvessels and genital organs. Virchow described a congenital hypoplasia of the vascular system found in several autopsies on chlorotic patients. The aorta and all its branches were of small caliber and thinner than normal; the elasticity of the vessels, however, appeared to be increased. The heart is at times dilated and the left ventricle hypertrophied." I will not quote others, as they all agree essentially and the quotations given represent the latest and best observations on the subject.

To sum up, we may say that we have in the heart, according to the degree and character of the anemia, the following morbid conditions present: Laxness and flaccidity of the myocardium with some dilatation of the cavities and some hypertrophy of the left ventricle, fatty degeneration varying from a mild degree of degeneration of some of the fibers of the musculæ papillares to the severe grade of degeneration seen in progressive pernicious anemia.

The shortness of breath, the palpitation, the pain, the increased area of cardiac dulness, and the murmurs are the symptoms and signs that it behooves us to explain from our pathologic findings. The first four are easy of explanation and there is essentially no difference of opinion among observers in regard to them. The shortness of breath and the palpitation are both due to the effort on the part of nature to supply sufficient oxygen to the organism by increasing the rapidity of the stream which is so poor in the oxygen-carrier, hemoglobin; the pain is probably the cry of starved nerves for more or better food; the slight increase in area of cardiac dulness observed in some cases is undoubtedly due to the mild degree of dilatation and hypertrophy that has been observed.

The most interesting point, and the one about which there is more difference of opinion among competent observers, is the mode of production—the mechanism—of the anemic murmurs. When fluid is driven with a certain amount of velocity

through a constricted opening into a larger space beyond, a sound is produced that has been shown by careful experiments to depend upon the vibrations of what have been termed fluid veins, produced at a greater or less distance from the orifice according to its size and the velocity with which the fluid is propelled. In the case of heart-murmurs dependent upon organic lesions of the valves—whether the murmur is direct or regurgitant—the sound is produced in this way, the blood being propelled with a certain velocity through a constricted opening into a larger space beyond. The sonorous vibrations of these fluid veins are transmitted to the surrounding blood, to the walls of the containing vessel, and thence, through whatever medium may intervene, to the ear of the listener. This is beyond doubt the true explanation of the mechanism of heart-murmurs dependent upon valvular diseases.

We have seen that by different competent observers the cardiac murmurs of anemia have been located at the aortic, the pulmonary, the mitral, and the tricuspid areas, and in the area described by Balfour in the second left intercostal space to the left of the pulmonary area. For the most part these murmurs have been systolic in time, though a few diastolic murmurs have been described. Is there any rational manner in which we can explain the production of these murmurs which will satisfy all these observations, for we obviously have no right to doubt the diagnostic power of any observer unless we have proof of the inaccuracy of his observations.

First, then, how is this murmur produced at the aortic orifice? In a healthy individual by the ventricular systole a certain amount of blood of a definite weight is driven with definite velocity against the semilunar valves, pressing them flat against the walls of the artery. Evidently if the weight of the blood is reduced below a certain limit, though the velocity remains the same or even be slightly increased, the semilunar valves will hang out into the lumen of the vessel and thus produce a constricted opening with a larger space—the cavity of the artery, beyond—all that is needed to produce the fluid veins of Savant and the consequent sonorous vibrations resulting in the murmur. A similar line of reasoning would apply to the production of the murmur at the pulmonary orifice. Before leaving the base of the heart we have the observation of Hanford, which has been confirmed by us all, that in a certain number of cases the basic murmur is increased in intensity when the patient lies down. Hanford's own explanation is that when the patient lies down, owing to the lax and flabby condition of its walls, the whole heart *falls upward* and presses upon the larger vessels, thus producing a constriction and the necessary mechanic condition for the

production of a murmur; that when the patient assumes the upright position the heart *drops down* again and the murmur disappears, or only so much remains as may be due to the obstruction produced by the hanging out of the valves as I have suggested. Personally I am not quite satisfied with this explanation of Hanford's, but I have not as yet anything more rational to offer in its place.

Now how about the murmurs heard at the mitral and tricuspid areas? As they are systolic in time, they must be regurgitant in character.

We have learned that in the morbid anatomy of anemia there is a lax and flaccid condition of the muscular fibers and often some fatty degeneration; that when there is fatty degeneration, it is more marked in the musculæ papillares to which the chordæ tendinæ are attached, and is not infrequently limited to those structures. We have found that with this laxness and flaccidity of the walls there is developed a certain amount of dilatation of the cavities, producing a dilatation of the auriculo-ventricular orifices and a consequent insufficiency of the valves, resulting in regurgitation. This is the explanation given by Dr. Balfour of the mitral regurgitation observed by him. This would require a considerable dilatation of the ventricle, more than we have any right to premise from the size of the heart as shown by percussion. Another and, to me, more rational method of explaining this regurgitation—one long ago brought forward by Walshe, of Dublin—is through the fatty degeneration and consequent weakening of the musculæ papillares to such an extent as to allow the auriculoventricular valves to yield to the pressure of the blood during the ventricular systole and permit the regurgitation to take place. As for the murmur heard in the area described by Balfour we must remember that he says it is "about one-inch-and-a-half or rather more to the left of the pulmonary area and in the same plane immediately over the part where the appendix of the left auricle pops up from behind just to the left of the pulmonary artery." It is a well-known fact that sometimes a mitral regurgitant murmur is heard with greatest distinctness at this point, the sound being conducted better "along the course of the regurgitating blood, the fluid veins producing sonorous vibrations louder at the point of impingement than at that of origin." From these observations he concludes that the heart-murmur of anemia is one of mitral regurgitation. We have just shown how mitral regurgitation may occur in anemia, and thus the murmur heard in Balfour's area is accounted for.

In those rare cases, such as Strümpell's case of pernicious anemia, in which a diastolic murmur occurs, the dilatation of the ventricle has probably proceeded so far as to dilate the aortic orifice and so allow regurgitation to take place at that point.

Thus, we see, we have a rational explanation of the mode of production of anemic heart-murmurs which is applicable to all cases, and is none other than that which holds in the case of organic murmurs, namely: An obstruction to the onflow of the blood, causing at one point a narrowing of the lumen of the vessel through which it passes, thus producing the fluid veins already referred to.

The arterial murmur heard in the carotids in a certain number of cases is synchronous with the cardiac systole, and is, in my opinion, merely a transmission along the current of blood of the cardiac murmur arising at the aortic orifice. The venous murmur, however, is a continuous humming sound, and so cannot be referred for its origin to the cardiac murmur, which is necessarily intermittent, as it occurs only with the systole. It must, therefore, originate in the vein itself, and here we find a cause for it. The external jugular vein is attached to the clavicle, the lower part of the vein being thus kept constantly extended, and not permitted to collapse down upon the blood; just above this somewhat enlarged chamber of the vein is a pair of valves; owing to the relaxed condition of the walls of the vein found in anemic individuals and the lack of weight of the blood necessary to keep them in place, it is highly probable that these valves hang out into the lumen of the vessel and produce the necessary obstruction for the formation of the fluid veins of Savant and their sonorous vibration. The continuousness of the sound is probably due to the fact that the velocity of the blood-current is much more constant, though not so great as in the arteries.

To sum up, we have the following facts before us: First, that when fluid is forced at a certain velocity through a constricted opening into a larger space beyond, at a certain distance from the orifice, its particles are thrown into sonorous vibration; second, that in certain diseased states of the cardiac valves, we have beyond a doubt the necessary conditions for the production of such sound, and the presence of the sound; third, that when there is no such diseased state of the valves, but when, from the impoverished state of the blood and certain changes in the myocardium, we should expect the healthy valves to be placed in such a position as to produce the constriction mentioned, we find the murmur, the indication that such constriction exists, present; therefore, I think we are justified in concluding that the valves are in that position, especially as the murmur can be satisfactorily accounted for in no other manner.

What practical conclusions as to the management of our cases can we draw from the facts before us? I think we are justified in the following: If the murmur is heard only at the aortic or pulmonary



orifice and is systolic in time, it is probable that the condition of the blood is the chief factor in its production and that the cardiac muscle is still in fair shape; if, however, the pulmonary second sound is considerably accentuated as compared to the aortic, there is probably already some change produced in the myocardium of a degenerative character; if the murmur is heard with greatest intensity at the apex, or in Balfour's area, or over the tricuspid valve, there is already present marked change in the myocardium; if there is a diastolic murmur the condition is most serious. The relative strength of the aortic and pulmonary second sounds is a pretty fair index of the strength of the heart; the more the pulmonary is accentuated the weaker is the heart.

The treatment of anemia may be summed up briefly as follows: Keeping the bowels, skin, and kidneys active; a careful supervision of the diet; regularity in eating; the internal administration of iron and arsenic in varying proportions according to the relative proportion in the blood of the hemoglobin and the red corpuscles; the inhalation of pure oxygen-gas; exercise, passive or active, according to the condition of the heart; the administration of the tincture of nux vomica in increasing doses to strengthen the cardiac action.

I think that we are all agreed that exercise is important for anemic individuals, but I think it of the utmost importance that the condition of the heart should be the index to the character and amount of exercise. The heart in an anemic individual is just in the condition in which too great or too prolonged exercise may cause a dilatation that will produce a permanent mitral insufficiency or possibly a worse condition. Therefore, in those cases in which the physical examination shows aortic or tricuspid regurgitation, and in most of those in which mitral regurgitation is revealed, rest in bed for a more or less prolonged period, according to the effect produced, is indicated. The necessary exercise should be supplied by massage and muscular movements given by one thoroughly competent.

The slow, deep inhalation of pure oxygen-gas is of the utmost importance in these cases in that it supplies the oxygen and conduces to full expansion of the lungs, thus improving the circulation and increasing the strength of the cardiac action. The administration of tincture of nux vomica in gradually increasing doses is of great value in increasing the vigor of the myocardium.

The chief point I wish to urge is the careful examination of the heart in all cases of anemia, the location of the origin of the cardiac murmur or murmurs that may be present, and the regulation of the character and amount of exercise according to the findings of the physical examination.

# RECENT EXPERIENCES IN THE SURGERY OF THE HYPERTROPHIED PROSTATE.

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(Concluded from page 598).

CASE VI.—Dr. H. G. Wetherill, of Trenton, N. J., has been kind enough to send me the following facts as to a case operated upon June 13, 1895: The man was 73 years of age and had depended upon the use of the catheter for a year. He had an enormous prostate, measuring  $3\frac{1}{2}$  by  $2\frac{1}{2}$  in. He was able to pass about three ounces of urine in 24 hours, and was drawing 60 ounces by the catheter. Thirty-six hours after double castration he passed three ounces of urine at one effort and about 12 ounces on the second day after the operation. On the twelfth day he passed 10 ounces of urine freely and without pain on rising in the morning. The catheter was then introduced and the bladder was found to be practically empty. Both of the testes were cystic and there was a hydrocele on either side. The patient was delighted with the result of the operation.

CASE VII.—I am indebted to Dr. B. M. Ricketts, of Cincinnati, Ohio, for the following report: One month ago I performed double castration upon a patient aged 79 years. The operation was done with cocain-anesthesia, 1 gr. being used, and occupied seven minutes. The patient passed about 6 ounces of pus daily for one week previous to the operation, at which time the average period between the successive acts of micturition was twenty-two minutes. At the time of the report the pus had disappeared; the patient urinated about once every hour; the general health had also improved.

CASE VIII.—Dr. J. C. Reeves, Jr., of Dayton, Ohio, has very kindly sent me the following report: A man, aged 72 years, had had a high grade of diabetes for some years, difficulty in passing water for over four years, and was entirely dependent upon the use of the catheter for four months, during which time urine was passed from every half-hour to two hours, the act being accompanied by considerable distress; the urine was clear. By rectal examination the prostate seemed to reach almost to the sides of the pelvis. Double castration was performed under cocain-anesthesia, without giving the patient any pain. The only systemic effect of the drug that was noticed was slight talkativeness. The patient passed from observation, but at the end of ten weeks it was reported that he was still obliged to use the catheter two or three times a day, although a portion of the urine was passed without it. On the day of this report (July 21, 1895) half a pint was passed voluntarily at one effort. The patient's general condition is improving.

CASE IX was operated upon by Dr. A. H. Levings, of Milwaukee, and is reported in THE MEDICAL NEWS, August 17, 1895. J. B., aged 77 years, was obliged to resort to the use of the catheter eighteen years ago on account of an enlarged prostate. For thirteen years he was entirely dependent upon this instrument. Five years ago, as instrumentation be-



came almost impossible, a suprapubic cystotomy was performed and an artificial urethra established.

The condition seemed satisfactory for three or four years, when he began to complain of pain. The cystitis grew worse, and repeated rectal examination established the fact that the prostate was constantly increasing in size, until the time of the operation, when it was as large as a cocoanut. Castration was performed May 14, 1895. On June 20th, 36 days later, the patient passed a small stream of urine, the first time for 18 years. He has continued to do this every day; the size of the stream is increasing, and for the week preceding the report he has used the suprapubic opening night and morning only when the bladder was irrigated. The prostate had diminished in size about one-half, the cystitis was much improved and the severe pains had practically disappeared.

CASE X was operated on by Dr. A. H. Levings. The man was 51 years old, and had been dependent upon the use of the catheter since December, 1894. About the middle of December the right testicle became inflamed and suppurated; two weeks later the left one became similarly affected. Upon entering the hospital there were two ounces of residual urine, which was ammoniacal and contained a considerable quantity of pus; both lobes of the prostate were very decidedly enlarged. The disease of the testicles was thought to be tuberculous. Both were removed with the view of reducing the size of the prostate. Two weeks after the operation the patient was walking about the hospital almost wholly free from pain; the urine had become acid and almost clear, the catheter was no longer necessary, and the residual urine had entirely disappeared. At the end of 25 days the left prostatic lobe was scarcely to be felt, while the right was much reduced in size. The patient was discharged in excellent condition.

CASE XI was operated upon by Dr. H. O. Walker, of Detroit. The patient was 65 years of age; he had had symptoms of prostatic obstruction for eight years, namely, frequent micturition, frequent use of the catheter, a large amount of residual urine loaded with pus. Rectal examination revealed a very much enlarged prostate. As the man had run the gauntlet of treatment by catheterization, irrigation, and medication without benefit, both testicles were removed on February 10, 1895. He was shown to the class in two weeks, at which time he was able to retain his urine for from four to nine hours; the catheter was discarded after the ninth day. The pain had all disappeared and there was but little pus in the urine. The patient was able to pass urine without much effort, and the prostate had appreciably diminished in size.

CASES XII to XIX, inclusive.—The *British Medical Journal* of August 17, 1895, contains an abstract of a paper by Kummell, in the *Berliner Klinik* of August, 1895, in which 8 cases are reported upon which the operation of castration had been performed by the author on account of prostatic hypertrophy. The operation was followed by considerable relief in all the cases. One patient, aged 77, died from exhaustion four weeks after the operation. In two cases the function of the

bladder was restored in spite of considerable weakness of the detrusor. In the author's opinion the treatment of hypertrophy of the prostate by double castration compares favorably with other operative measures in being simpler in performance and less dangerous.

CASE XX.—The following case is reported by R. Church in the *New Zealand Medical Journal* for July, 1895: The man, aged 62, consulted the author 18 months before the present report, on account of great pain and difficulty in passing urine. He stated that he had been treated previously for this trouble. The symptoms commenced 7 years before, and had gradually increased in severity, until at the present time "life was a misery to him." For a few years back he had occasionally used the catheter, but of late he had been unable to pass it without excruciating pain and sometimes hemorrhage. There was a slight cystitis; the prostate was greatly enlarged. Washing out of the bladder and careful use of a coudeé catheter improved the condition for a time. The patient's condition on February 11th was described as one of agony. He had lost all appetite and had decreased in weight 2 stone 7 lbs. Sleep came only in snatches. The pain was so intolerable that he resorted to chlorodyne, taking 40 drops at a time. Double castration was performed February 18th. At the end of the first week the gland was appreciably smaller as measured by the catheter and by rectal touch. The pain was but trifling; the patient was at times able to urinate without the catheter. At the end of the second week the prostate was one-third smaller, with still further improvement of the symptoms. At the end of the third week it was reduced to one-half of its former size, the symptoms still improving. March 18th the gland was only slightly larger than normal. The patient was able to sleep about four hours at a time during the night; appetite was restored; the weight was increased; there was practically no pain, but still some slight atony of the bladder, necessitating the occasional use of a catheter, which could be passed, however, without pain. Instead of brooding over his trouble he interests himself in his business affairs. Mentally and physically he is a better man. The author states that to all intents and purposes the patient is cured.

CASE XXI.—In a discussion upon the treatment of prostatic hypertrophy before the Massachusetts Medical Society, June 11, 1895,<sup>1</sup> Dr. L. Bolton Bangs, of New York City, referred to a case which he was asked to see in consultation. The patient was 64 years of age and had all the evidences of prostatic obstruction. He was straining in a most agonizing manner to expel a few drams of purulent urine every two hours. He had a cachectic appearance and an overdistended bladder. Dr. Bangs was asked if the case was a proper one for castration. He replied in the negative, because the patient's kidneys were evidently affected. Nevertheless, castration was performed, the patient dying a week later.

CASE XXII.—In the same discussion Dr. Edward L. Keyes mentioned the case of a man, aged 65

<sup>1</sup> Boston Medical and Surgical Journal, August 2, 1895.

years, apparently in good health. Many years before he had had a suppurating testicle. The speaker had also seen the patient a number of times at long intervals with slight attacks of recurrent prostatic suppuration, with a mild catarrhal cystitis, causing vesical spasm, but never laying him up. He came back in another of these attacks, when he said he was rather tired of them, and asked to have the testicles removed. Dr. Keyes was anxious to adopt other methods of treatment, and if possible relieve the catarrhal disturbance before operation. Being overpersuaded by the patient, however, he finally yielded, and removed both testes under cocaine-anesthesia. The symptoms increased gradually, and it was advised that the bladder be drained. The patient and family objected, however, and the patient died in the fifth week after the operation. No autopsy was allowed. Examination before death failed to reveal either a stone, a tumor, or ulceration in the bladder. Nothing could be found but a moderately enlarged prostate and a moderate amount of catarrhal cystitis in the prostatic sinus.

CASE XXIII.—At the same meeting Dr. Abner Post, of Boston, described the case of a man, aged 76 years, who was under observation two weeks, during which time he was catheterized by an attendant five times in 24 hours, although he was constantly begging for the use of the catheter. His pain and discomfort were very great; he was a feeble old man, was confined to bed, and complained a great deal of his head. He kept informing the attendants that he should go crazy if he did not have relief from his bladder-trouble. Treatment in bed, with careful systematic catheterization and washing of the bladder, for his urine was purulent, failed to give him relief, and at the end of 16 days, in spite of a general febrile condition, Dr. Post performed the operation of castration, although without any great hopes of relief. At the end of three weeks the patient was able to pass as much as five ounces of urine at a time. Although there is still some residual urine, he has to be catheterized only once daily. His mental condition has changed wonderfully for the better.

CASE XXIV.—A second case reported by Dr. Post is the following: A man aged 59 years, with a prostate very much enlarged, and a distinct bar at the end of the bladder, was obliged to pass water every hour. He had six ounces of residual urine, and he asked to have the operation done. He was kept under observation for a fortnight when the operation was performed. The intervals of urination have increased from 2 to 3½ hours. There is something like one-half the former amount of residual urine, but a good deal of the pain and discomfort has disappeared. The prostate does not seem to have undergone much diminution in size.

CASE XXV.—Mr. H. W. M. Kendall reports (*British Medical Journal*, Sept. 28, 1895) the case of a man, aged 82, an old Hungarian, who had suffered for some years from retention of urine and cystitis, necessitating the almost incessant use of catheters. For six years past he had been unable to leave his cottage, and when admitted to hospital was in a miserable condition, getting no rest night or day from the pain and distress caused by the

continual desire to micturate, the bladder being intolerant of urine about every 15 minutes. The urine was in a stinking condition, viscid, andropy. Rectal examination showed an immensely enlarged prostate, the finger not being long enough to reach its boundaries. On April 18th, after a preliminary hypodermic injection of a quarter of a grain of morphin, the operation was performed under chloroform, as described in the *British Medical Journal* of January 5th, the testicles being removed through a median incision in the lower part of the scrotum. Immediate relief was obtained, the patient retaining his urine four hours, and passing it without pain.

One or two attacks of cystitis recurred, requiring irrigation of the bladder occasionally, and convalescence was retarded by an acute attack of hysteria. The man was discharged early in July, quite free from all his troubles, having gained rapidly in weight and strength, and, according to his own statement, as well as he was 30 years ago. He can now walk three or four miles and only complains of being always hungry. Before his discharge examination by the rectum showed that though the prostate had diminished considerably in size, it had by no means disappeared, as described in some previous cases.

CASE XXVI.—Dr. Thomas S. K. Morton, of Philadelphia, has been good enough to send me a report of the following case: M. W., aged 71 years, was admitted to the Pennsylvania Hospital August 25, 1895. There was given a history of increasing difficulty in micturition extending over a considerable time and culminating in total retention. Attempts by a physician to relieve the bladder failed of their purpose, but originated alarming hemorrhage. Subsequently the man was removed to the hospital. Upon admission it was found that he was still bleeding and had a greatly distended bladder. Ordinary instruments failed to pass the prostate, but finally a vertebrated catheter of large size gained admission and drew off the urine. Then it was proved by rectal examination that an enormously hypertrophied prostate existed. It was as large as an orange and exceedingly soft in consistency. The urine was black with decomposed blood, ammoniacal, and contained much pus and detritus. Hemorrhage ceased after catheterization, but recurred upon each subsequent introduction of the instrument. The difficulties attending the withdrawal of urine constantly increased until it became apparent that operative interference must be resorted to or the man would speedily perish. It was decided, if consent could be secured, to perform castration, and if this failed to do a cystotomy later. The experimental nature of the proposed operation having been explained, written consent of the patient and some of his relatives was secured. The testicles were removed August 28th. Although catheterization had to be continued, bleeding ceased almost immediately after the operation, and the urine began to clear up and become less decomposed. On August 30th the urine had become entirely clear of blood, pus, and odor, and two days later was and has since continued to be normal. On the second day after the operation the man began

to pass a portion of his urine. This amount steadily increased until a week later the catheter was discontinued and there was no residual urine. Examination of the prostate by the rectum at this time demonstrated its reduction in size to that of a hen's egg and in consistency to that of the normal gland. The change was quite surprising. Following this the man passed through a period of partial incontinence which was ascribed to weakened sphincteric action. But this slowly improved, so that in three weeks from the time of the operation the action of the bladder was normal.

On October 28th the man was in excellent health and could not sufficiently express the extent of relief that the castration has afforded him. He urinated from four to six times a day, had no distress whatever, and passed normal urine. The prostate was much smaller than when examined two weeks after the operation, and has become very dense in structure, as well as perfectly insensitive. Owing to the patient repeatedly removing the dressings, both wounds suppurated, but no harm resulted.

CASE XXVII.—Dr. J. T. Stewart and Dr. Francis L. Haynes, of Los Angeles, have kindly sent me this memorandum of a case recently operated on: "This patient, aged 65, was suffering great agony on account of inability to pass urine. His prostate was enormously enlarged. During the past year the difficulty of voiding urine increased until for a month life had become a burden. After a consultation it was decided to castrate him, and the operation was performed. In a few days the pain subsided and he began to pass his urine easily. He left the hospital with his wounds healed a week from the day of operation. The case was examined by the leading surgeons of this city, and they are following the case with us. Now, one month later, he voids urine like a boy."

As to the permanence of the good effects thus produced, all the evidence that has reached me justifies the belief that serious relapses will be very rare or altogether unknown. Nothing of the kind has occurred in any of my own patients. I have seen some cases and heard of others in which there were days or weeks during which some of the symptoms (especially the vesical irritability) were worse than at previous periods. Occasionally the degree of relief experienced is so slight as to be disappointing. It must be understood that we do not yet know enough to select accurately and without a certain percentage of error the cases in which there is not a reasonable hope of improvement.

A further report of the case described by Bryson in the *New York Medical Journal* of April 27, 1895 (Case VI of my earlier table), appears in the same journal of August 3d, and illustrates this point. The article concludes as follows:

A man, aged 74 years, shows first evidences of beginning prostatism at the age of 56 years, which slowly increase during the succeeding 11 years until the tidal urine reaches 12 ounces, while the residual is 3 ounces (dilatation of the bladder from obstructive

prostatic overgrowth). He rises thrice at night. In the following 6 years the residual urine increases to 6 ounces. The tidal diminishes to about 2½ ounces and the diurnal and nocturnal frequency increases to 18 and 6, respectively, with marked diminution of detrusor energy (evidences of increasing obstruction, with thickening and degeneration of the bladder-walls). Cystitis and a mild pyelonephritis develop. Two separate attempts to enter on catheter-life fail on account of increased irritation, difficulty in entering the bladder and aggravation of cystitis; dilatation of the heart and pulmonary emphysema supervene. All unfavorable symptoms increasing, castration is done for relief.

*Demonstrable Results.* Marked and satisfactory diminution in the size of the enlarged prostate, without change in frequency of urination day or night, without alteration of tidal, but with slight decrease of residual urine. Pyuria, bacteriuria, and pyelonephritis remain practically the same. In a few words, the double orchidectomy has caused an almost complete atrophy of the prostate gland without effecting any change in a chronically inflamed and degenerated bladder and equally without curing or even benefiting a chronic pyelonephritis from extension.

But, on the other hand, as I have said, relapse in the sense of the return or recurrence of the overgrowth has not yet been reported, and in no case among those who have been benefited physically by the operation and who have been restored to good general health have there been any consecutive phenomena, either mental or physical, which could be attributed to the castration. I am now constantly asked whether any change in voice or in manner, any diminution of mental energy, any sudden putting on of flesh, any alteration of figure, or, in other words, any appearance of "eunuchism" is to be expected. I can only say that, so far as I know, nothing of the sort has occurred and that I believe it to be in the highest degree improbable and unlikely that it will occur.

A personal communication received from Dr. Francis L. Haynes, Los Angeles, dated August 7, 1895, states that the first patient whom he castrated for enlargement of the prostate, and who was the first case operated on in this way in America, has remained in the favorable condition described in my paper in the *July Annals of Surgery*. The operation was performed December 12, 1893; the condition of the patient in August, 1895, was as follows: "The urine is passed normally without the use of the catheter; the man is obliged to rise once at night. He has passed 9 hours without voiding urine, but the average is five times daily. There are two drams of residual urine, which is perfectly normal. The patient feels well. Examination with the vesical sound indicates that the prostate has nearly disappeared. Digital examination by the rectum shows that the large lateral prostatic masses that were present before the operation have entirely disappeared, so that nothing can be felt ex-



cept normal bladder-wall, which is, however, a little thickened. The patient's mind is in excellent condition. He says: 'It is a good operation and everybody with my disease should go through it.'"

This is the oldest case of which I have recent information.

*Excision of the Vas Deferens.* In July I reported the effect of ligation or section of the vas deferens in seven dogs that had been killed at various periods afterward. After giving the details, I said that, while there were comparatively few changes in the testicles themselves, there was nevertheless a constant loss of weight in the prostate in every dog that died after 8 days. Even at 10 days this loss was perceptible. In dogs which were kept for 52 days the atrophic changes were unmistakable, and they were to be found in nearly every section. I added: "If these results are reliable it will certainly be worth while to investigate still further the effect of obliterating the vas, although outside of these experiments there would seem to be every theoretic reason to agree with Griffiths who says 'With regard to the suggestion made by Mr. Reginald Harrison of the division of the vas deferens in cases of enlarged prostate, I have not sufficient experience to arrive at a conclusion; but, seeing that obliteration of the vas deferens has so little effect upon the structure and secretion of the testis, it must be doubtful whether the operation will suffice to influence the enlargement of the prostate.' Possibly I have wounded other structures in exposing and tying the vas, but I was very careful and the operation is easy. It may well be that the whole effect upon the prostate caused by the removal of the testicles is exerted through the medium of the nervous system. It would be easy to make a strong argument in favor of this view, basing it on well-known physiologic facts. And it may also be that in tying or cutting the vas certain nerves, more potential than others, are included or are themselves divided. In the dog they are all small and difficult of recognition without an extensive dissection. I wanted to tie or divide the nervous constituents of the cord alone and in a separate series of experiments, but the difficulty of finding them all and of avoiding damage to other structures was so great that I gave up the idea after some trials. Still, I should think it feasible and hope to make the attempt at some future time. Dr. King, of Toronto, has, in two experiments on dogs, had results from dividing the vas precisely similar to those I have detailed, a fact which increases my confidence in my own experiments."

In the summary of that paper I said with reference to this subject: "My experiments on dogs have shown in nearly every case in which the vas deferens was tied or divided on both sides, that, without much change in the testicles, there were beginning atrophy

and considerable loss of weight of the prostate. These experiments need repetition and confirmation, as the absence of corresponding testicular change seems to make the results somewhat anomalous. It is possible that the inclusion or severance of small but important nerves may account for the effect on the prostate."

There is now additional evidence to offer. Pavone records in *Il Policlinico*, June 1, 1895, the result of his experiments on dogs with regard to the effects of removing the testes or the vas deferens alone. He finds that bilateral excision of the vas deferens in dogs brings about the same atrophy of the prostate as castration. Drawings of the microscopic appearance of the prostate glands after castration and excision of the vasa deferentia, respectively, show that practically the same changes occur after both operations. The author, therefore, recommends excision of the vasa deferentia for prostatic hypertrophy in preference to castration, as being a simpler operation, and giving equally good therapeutic results.

Isnard, in the *Centralblatt für Chirurgie*, 1895, No. 28, reports two cases in which he performed division and ligation of the vasa deferentia for enlarged prostate. The first operation was performed in 1894. The patient died of marasmus two months later. At the autopsy he was found to have had carcinoma of the prostate, and consequently no benefit could have been expected to follow the operation.

On May 1, 1895, he performed his second operation, on a man, 72 years of age, who had suffered for the past year from the result of prostatic hypertrophy, in combating which all the usual methods of treatment had been useless. The patient was presented before the Medical Academy on June 14th, entirely cured. Retention of urine and incontinence had entirely disappeared. During the night the patient was able to retain his urine seven hours. It is now clear and normal, while formerly it was purulent, and from time to time mixed with blood. The prostate which before operation was as large as half a nut, can now scarcely be felt by examination per rectum.

Dr. E. E. King, of Toronto, sends me the following details of a case in which he excised  $2\frac{1}{2}$  in. of each vas deferens. The man was 65 years of age, and was in great distress from the results of prostatic enlargement. The patient stated that five days after the operation the relief that he had experienced since its performance had already fully repaid him. The middle lobe was the most enlarged. The gland was very hard. The effort that had formerly been required to start the stream was at the time of report practically absent.

Dr. F. Tilden Brown, of New York, has furnished me with the details of a case in which he applied double ligatures to both vasa deferentia for enlargement of the prostate in a man of 70, who was wholly dependent upon the catheter, not being able

to pass a drop of urine voluntarily during the three weeks he was under observation in the hospital. The operation was done with cocaine-anesthesia. On the second day after the operation he began to pass a few drops of urine. At the date of Dr. Brown's letter, 2½ months after the operation, the patient was perfectly comfortable. Urine was passed on an average of four-hour intervals, and but for the advice of the author the catheter would have been dispensed with. The residual urine averages a little more than one-half the quantity passed at a voluntary effort. Before operation the catheter was inserted 9½ in. before drawing urine, and at the present time 8½ in.

Chalot reports the following case in *L'Independence Médicale*, November 6, 1895. A man, aged 64, had been troubled with moderate symptoms of enlargement of the prostate for 15 years, and with decided symptoms for two years. He had been addicted to the use of liquor and to sexual excesses; he had never had gonorrhea. He was obliged to pass urine frequently, especially at night, but without feeling relieved. The stream was small and intermittent. The length of the urethra measured 26 centimeters. The urine was clear usually, but was sometimes a little blood-stained at the end of micturition. Rectal examination showed the transverse diameter of the prostate to be about 5 cm. The gland was uniformly enlarged. There was neither calculus nor tumor of the bladder.

On February 28, 1895, Chalot resected 1 cm. of each vas deferens after having applied double ligatures of fine silk. Two months later the patient was in good spirits, his appetite was good, he had gained in weight, and micturition was about normal; he urinated 3 or 4 times a day and twice during the night. The testicles were sensibly smaller, but not as much as the author had been led to believe from the published observations. Their consistence had scarcely increased, as had been noted by Isnardi. Rectal examination showed the prostate to have decreased one-half in volume.

In July, Chalot heard that the patient had frequent and complete erections, and that he indulged in sexual intercourse. The general condition was excellent; the urine was passed naturally and freely.

Guyon reported to the French Association of Surgery (*La Tribune Médicale*, October 30, 1895) three cases in which a portion of the vasa deferentia had been resected for hypertrophy of the prostate gland. Two of these were operated upon by Guyon and one by Leugeu. In one of the cases the enlargement was considerably diminished. In all, catheterism was more easily performed, and was required less frequently. In Legueu's case, a voluminous epididymitis was relieved.

In the light of these facts I believe excision of the vas to be a justifiable experiment, especially in cases which, while otherwise fitted for castration, are

either so ill that even that operation becomes dangerous, or so well that they are prevented by sentimental reasons from attempting to arrest in that way an overgrowth of the prostate that unrelieved would surely end their lives after a more or less prolonged period of great suffering.

## CLINICAL LECTURE.

### SOME PHASES OF SYPHILIS OF THE BRAIN.

*A Clinical Lecture delivered at the Philadelphia Hospital.*

BY CHARLES K. MILLS, M.D.,

NEUROLOGIST TO THE HOSPITAL; PROFESSOR OF MENTAL DISEASES AND OF MEDICAL JURISPRUDENCE IN THE UNIVERSITY OF PENNSYLVANIA, ETC.

(Concluded from page 610.)

CASE VI. *Paralysis of the left abducens, with dilatation and immobility of the right pupil; slight neuroretinitis.*—The patient, J. D., aged 36 years, has a history of gonorrhea, syphilis, and alcoholism. He has improved so much since admission that I cannot show you the most striking feature of his case. As will be observed, a left internal strabismus is now scarcely detectable. On admission he had marked internal squint of this eye. The right pupil is seen to be larger than the left and does not respond to light. From the statements of the patient and the records furnished by Dr. Oliver I learn the following facts: Shortly before his admission to the hospital he had occasional spells of dizziness and some frontal headache. Dr. Oliver found that he had almost complete paralysis of the left external rectus muscle, and associated with this was slight dilatation of the right pupil with almost total immobility of the iris to light. No disturbance of accommodation was present. The left iris was mobile to light and accommodation. Slight neuroretinitis was also present and vision was reduced to 1/7 and 1/9. Under 50 grains of potassium iodid three times daily, the patient's vision became practically normal, the left internal squint nearly disappeared, and the general condition of the patient greatly improved. The dilatation of the pupil remains.

This is clearly a case in which the foci of syphilitic disease attacked the root-fibers or trunk of the sixth nerve and the nucleus or root-fibers for movements of the iris. A nodose periarteritis or a gummatous meningitis, or both conjointly, might account for the phenomena.

CASE VII. *Implication of the cranial nerves (except the sixth) from the fifth to the ninth, inclusive.*—L. D., aged 26 years, a mulatto, had rheumatism about nine months ago. Seven years ago he was struck with a bar of iron on the top of his head. No other history of importance was obtained. Four months before admission he began to have constantly frontal and occipital headache, which gradually grew worse. One morning he found the right side of his face entirely paralyzed, and he had a ringing sensation as if his right ear was "plugged up."

On admission this patient was found to have complete paralysis of all the muscles of the right side of the face, including the muscles supplied by both the seventh

nerve and the motor distribution of the fifth (Fig. 6). No deviation of the tongue was present. Anesthesia was present on the right side of the face, extending from the median line to the angle of the jaw, and from 2 in. above the hair-line to the point of the chin. The conjunctiva of this side was also totally anesthetic, as was the right half of the tongue. No part of the body other than the face was anesthetic. Taste was entirely lost on the right side of the tongue, both at the tip and posteriorly, showing implication of both the chorda tympani and the glossopharyngeal. The electric reactions were those of degeneration in the affected muscles. A watch was heard by the right ear at about  $2\frac{1}{2}$  in., and by the left at 18 in. A fine haze spread over the right cornea, which on close examination proved to be due to numerous small points. A beginning neurokeratitis

FIG. 6.



Paralysis of the muscles supplied by the seventh and motor fifth nerve on the right side. In this case anesthesia of the right side of the face was also present, total in the ophthalmic division and partial in other divisions of the fifth. The eighth and ninth nerves were also implicated, as shown by loss of hearing and complete loss of taste on one side.

was evidently present. Under large doses of potassium iodid the patient made considerable improvement; in particular the area of anesthesia decreased, the neurokeratitis passed away, and there was considerable improvement of the paralyzed muscles.

In this case a large gumma probably occupied the lateral aspect of the pons and of the upper portion of the postoblongata. The abducens nerve escaped because of its more median position.

**CASE VIII. Complete facial and auditory paralysis.**—E. McC., aged 39, on awakening found her face drawn to the left, with mobility to shut her right eye. She is deaf and has marked tinnitus on the right side. The facial lines are obliterated on the same side. It is not necessary to go into a detailed study of this case which is one of comparatively common type. The majority of cases of peripheral facial paralysis, the so-called Bell's palsy, are of rheumatic rather than of syphilitic origin; but when a complete or nearly complete paralysis of the eighth (auditory) nerve is associated with paralysis of the seventh, as in this patient, the lesion is nearly always

a gumma or gummatous meningitis localized near the superficial origin of these two nerves. Doubtless this patient, who has only been recently admitted, will improve rapidly under specific treatment.

It was my intention to take up the subject of syphilitic pseudoparesis in the present lecture, but this and some other phases of encephalic syphilis will have to be postponed to another occasion. We see in this hospital three types of syphilitic disease in which the diagnosis of general paralysis of the insane is the problem. In the first place the case may be one of syphilitic pseudoparesis, the lesion being of Fournier's true specific class, and more or less amenable to treatment; in the second place, the case may be one of general paralysis of the insane in its most usual type—a parasyphilitic disease, one that will not respond to therapeutics; and in the third place, the case may be of transitional type, one in which the pseudoparesis is seen passing into parasyphilitic disease.

It is probable that a true inflammation of the brain-substance sometimes takes place as the result of syphilitic infection, but this is rare, and occurs especially in the vicinity of gummata, and in association with meningitis. A softening which is in reality necrotic and due to obliterative inflammation of the vessels, or to the occlusion of the vessels by a growth or an exudate, is sometimes supposed to be an encephalitis of "inflammatory softening." A form of localized disseminated encephalitis has been described by Charcot and others. The symptoms of local or disseminated encephalitis may be as multiform and irregular as the lesions producing them, and they will often be associated with the symptoms of the associated tumor, meningitis, or arterial disease—indeed, the more pronounced symptomatology of the latter affections will largely mask or overshadow those of encephalitis. Paresis, anesthetics, amnesias, cranial-nerve disorders of slight or marked character, visual, auditory, and other phenomena of the special senses of cerebral origin, may be among the symptoms.

Some forms of focal sclerosis of the nerve-centers are due to syphilis. According to Lancereaux, the syphilitic forms of sclerosis can be diagnosticated from the non-syphilitic by the greater tendency of the neuroglia to fatty degenerations and by the occurrence of foci of softening in their neighborhood. Whether or not true insular sclerosis of the brain is of syphilitic origin may be regarded as doubtful, although analogy would favor this etiology. Cases of miliary sclerosis and of lobular sclerosis have been recorded with details of autopsies and microscopic examinations of patients with clear histories of syphilis.

In conclusion let me say a few words about the treatment of such cases as have been presented in the course of this lecture. Cases of these clinical types, if recognized early and treated actively, will often respond favorably to treatment; cures, or at least approximate cures, can in some instances be obtained. Often the disease has produced some effects that are permanent, and even when it is arrested it is necessary to keep a watchful eye for years on the patient, reinstituting the treatment at regular periods even if no renewed evidences of syphilis are present.

Many practitioners seem to hail the diagnosis of nervous syphilis with a sense of satisfaction which has underlying it a feeling that in all such cases the prognosis is



good. It is possible to remedy some of the effects of nervous syphilis or to remove some of its symptoms; it is even possible that a cure may be attained, but this, as Gowers asserts, has never been proved.

The great remedies for nervous syphilis are the iodids and mercury. Authors differ as regards their relative efficiency, most authorities believing that either or both may be efficient. Some would disregard mercury altogether in many cases. Gowers holds that on the whole the iodid is the most useful and the most certain of the two drugs; still that either may be used with success in most cases. When the iodids fail, which is very rarely if success can be obtained at all, mercury may be used successfully even for the late manifestations.

The administration of large doses of the iodids, as much as from 400 to 800 grains in a day, has been called the American method. The iodids should always be given in an efficient manner. My usual plan is to begin with doses of from 15 to 20 grains three times a day, and increase by 5 or 10 grains daily until as much as a dram or even more is taken three times daily. I have seldom found it necessary to administer more than half an ounce in a day. On the whole, the amount which has proved most successful is from 2 to 3 drams daily. If iodism is produced, it may be necessary to discontinue the use of the drug for a time or to diminish the dose, although strange to say, occasionally when iodism results from the use of small doses, it may be made to disappear by rapidly increasing the amount ingested. Undoubtedly in some cases from 300 to 400 grains of potassium iodid or of sodium iodid daily will be well borne and will produce rapidly beneficial results.

Of the preparations of mercury used by the mouth, calomel and the biniodid are to be preferred, the former in doses of from  $\frac{1}{4}$  to  $\frac{1}{2}$  of a grain every two or three hours, giving at the same time, if necessary, preparations of opium, such as paregoric or even morphin, in order to prevent looseness of the bowels. The biniodid may be used in doses of from  $\frac{1}{15}$  to  $\frac{1}{4}$  of a grain every two hours, administering after each dose, if the bowels are affected, small doses of paregoric.

The use of mercury by inunction, if this treatment can be systematically and thoroughly pursued, is one of the best mercurial methods in nervous syphilis. The official ointment of mercury and mercury oleate are the preferable preparations. From  $\frac{1}{4}$  to 1 dram can be used daily. In order to be exact as to the amount used, a good plan is to divide an ounce of the ointment into  $\frac{1}{2}$ -dram portions, wrapping each of these in paraffin-paper. Mercurial inunctions and the use of potassium and sodium iodids may often be advantageously combined.

In Germany in particular and to some extent in this country, under the influence of the teachings of Wolff and others, mercury has been employed hypodermically and in some instances with striking success. The insoluble compounds of mercury and especially calomel are to be preferred.

Gowers wisely suggests that every syphilitic subject should for five years after the date of his last symptoms have a three-weeks' course of treatment twice a year, during which he should take from 20 to 30 grains of iodid daily. It is better that this rule should be adopted three times during the year instead of twice.

## CLINICAL MEMORANDUM.

### REPORT OF A CASE OF FECAL FISTULA— OPERATION WITH THE MURPHY BUTTON.<sup>1</sup>

BY A. E. SPALDING, M.D.,  
OF LUVERNE, MINN.

A SIMPLE and effective means of uniting the intestine, which is often needed in case of wounds or gangrene caused by the various forms of strangulated hernia, has long been desired. To Dr. J. B. Murphy, of Chicago, belongs the credit of making an advance in intestinal approximation which, to my mind, is one of the greatest discoveries of this century. That his button fulfils all the requirements in such cases is shown by his reports in *THE MEDICAL NEWS* of Feb. 9, Nov. 16, and Nov. 23, 1895.

I wish to report the following case:

On May 13, 1895, I visited Mrs. S. W. Clement, aged 67, residing at Jasper, Minn., with a view of operating on a fecal fistula that had resulted from an old femoral hernia of several years' standing. The fistula had occurred four weeks previous to my visit, and the entire contents of the intestines escaped at the opening or openings near the right femoral ring. The integument at the upper and anterior portion of the right thigh covering Scarpa's triangle was perforated with numerous openings, and the tissues were excoriated and tender from the constant irritation caused by the intestinal discharges. The patient was weak and much emaciated; the feet and ankles were edematous and the urine showed considerable albumin. With this unfavorable outlook, taking her age into consideration, I refused to operate and returned home. About a month later I received a letter from her attending physician saying that she was anxious to have something done for her relief. On June 27th last, with the assistance of Dr. Jenckes, of Jasper, and Dr. McGillivray, of Pipestone, the patient being placed under the influence of chloroform, I made an incision  $1\frac{1}{2}$  in. to the right of the median line and 3 in. in length, terminating at a point 1 in. above Poupart's ligament. The fistulous openings and the intestine had previously been irrigated with warm water. After the peritoneum was incised a catheter was passed into the fistula, and with two fingers in the abdominal cavity the adherent intestine was easily found. Great difficulty was experienced in detaching the bowel from the femoral ring, the adhesions being very firm. The clamp-forceps was used to prevent the escape of fecal matter into the abdominal cavity, this precaution being taken before an attempt to free the gut was made. After its separation the bowel was brought out of the abdominal wound and a section made on either side of the opening. This opening included the whole circumference of the bowel, excepting a small portion at its mesenteric attachment. That part of the intestine below the fistula had become contracted, owing to the continued non-performance of its proper function. The medium-sized Murphy button was used, and an end-to-end approximation made. Great care was taken in the adjustment of the peritoneal layers of the mesentery with the running thread previous to pressing the button together. The mesentery was

<sup>1</sup> Read before the Minnesota Valley Medical Society, Mankato, Minn., December 3, 1895.

then stitched with catgut and the abdominal wound closed. The patient recovered without a bad symptom. The bowels moved naturally on the sixth, and the button passed on the sixteenth day.

I believe this patient to be the oldest on record in which an end-to-end approximation was successful.

## TOXICOLOGIC NOTE.

### A CASE OF ATROPIN-POISONING IN WHICH ONE GRAIN WAS TAKEN; RECOVERY.

BY LAMBERT OTT, M.D.,  
OF PHILADELPHIA.

THE patient, a woman, 59 years of age, had taken 20 drops of a 4 per cent. solution of atropin sulphate by mistake. One-and-a-half hours afterward she said to her daughter that she must lie down as she felt so very heavy and tired, scarcely able to stand up, and her daughter seeing that her face and hands were a bright scarlet began an investigation and discovered that she had taken the eye-drops internally. I saw the woman at 12.30 o'clock, about 4 hours after the ingestion of the poison, and found her with glossy eyes, dilated pupils, scarlet-red in the face and all over the body, the maximum redness being in the face, then on extremities, and minimum redness on the trunk except over presternum, where the blush equalled that of the face. She lay in bed complaining of great thirst, dry throat and tongue; she responded to my questions with difficulty, like one in the relaxation of alcoholic intoxication. She was scarcely able to move from one position in bed, and when I asked her to lift her arm she raised it slowly and with great effort only partly from the side, but not above the shoulder-level. Her tongue was protruded with difficulty, requiring several efforts to force it from the mouth. She spoke of a tingling numbness in the feet and hands, like one having cold, chilled hands when the numbness is so great that touch and prehension are nearly nullified. She swallowed water with difficulty, making several efforts before a dram was gotten down. She was constantly passing water, apparently an ounce every 20 minutes. About 1 o'clock, or 4½ hours after taking the drug, delirium of an ecstatic nature set in. She now was intensely red and puffed about the face like one bloated and reddened by excessive drink; she grew very restless, was tossing from pillow to pillow, with unquenchable thirst and lips so limp as to permit the water to run outside of the mouth. She passed water frequently. Her talk was rambling, of the scenes of her childhood, her native country, Sweden, and she said persons looked so far away, and when she reached her hands out and found them near she seemed amazed. The glass of water, bottles, and dishes on the table by the bedside seemed small and distant, and not to be standing upright or were inclining to fall. When given a glass of water to drink in the delirious excitement, having more strength than in the early stage, she insisted on turning the glass on an incline to drink therefrom. Then began an incessant picking at the bed-clothes; pinching the arms of her daughter, who by sheer force had to restrain her in bed; reaching out to grasp imaginary objects and not finding them; a moving forward until restrained. Her respirations were rapid and short, the pulse feeble and 100

per minute, the temperature 101°. There was great wakefulness, the most incessant restlessness I ever saw in an ill person. In the early part of the trouble she seemed unable to move, like one paralyzed, but when the delirium set in she moved with more celerity. Later she described, as part of the delirium, seeing those about her as if their faces were unusually small and covered with black spots. She could not taste or feel; apparently she could hear; her sense of smell was not tested.

At 6.30 in the evening, 10 hours after taking poison, and about 5½ hours since delirium set in, she began to improve, having lucid intervals in which she anxiously inquired as to whether she was in danger, but before she understood or received a reply relapsed into her mental wandering. The next day she had lost her florid complexion and seemed greatly prostrated. On the 3d day after taking the atropin her mind was clear, her face decidedly pale, the extremities weak and tremulous in motion, and she had a constant desire to pass water. After that her recovery was uninterrupted. A peculiarity was noticed in the pupil not being as fully dilated as by the direct instillation of a strong solution of atropin, and holding a lighted match directly in front of the eye caused pupillary contraction. On the fourth day I put 2 drops of the 4 per cent. atropin solution in one eye, and soon after a larger dilatation of pupil followed than when under the systemic influence of a lethal dose. I gave her 3ss of brandy every hour, a cup of strong tea every half-hour, then cinchona and tincture nux vomica in strong and rapidly repeated doses. I did not give her the physiologic antidote, morphin, fearing to bring on a stupor and increase a dangerous relaxation; but active stimulation and large drafts of water as often as she could take them was my treatment.

## MEDICAL PROGRESS.

*Congenital Atresia of the Hepatic Duct, with Cirrhosis of the Liver.*—M'CALLUM (*Archives of Pediatrics*, vol. xii, No. 11, p. 842) has reported the case of a male infant, four months old, born at term, with a history of jaundice dating from a fortnight after birth. The discoloration had progressively increased despite medication. At the age of eleven weeks the left eye became severely inflamed, leaving a scar upon the cornea. For a week there had been cough. The child had always taken the breast greedily, but for two days it had vomited curdled milk. The bowels were constipated and the evacuations were pale, as a rule yellow, but sometimes greenish. The urine stained the napkins of a coffee-color. There was no history of hemorrhages and no cause could be assigned for the condition; a history of syphilis could not be elicited. The liver was enlarged and an umbilical hernia existed. Later the child was seized with convulsive movements and vomited coffee-grounds material. Death took place two days after the little one came under observation. Upon postmortem examination, in addition to the general icteric discoloration, the lungs presented numerous deep-blue patches, some of considerable size, extending into the pulmonary structure, in the case of the larger ones to an appreciable depth. Similar isolated patches were also present in the midst of the pulmonary tissue. These were found to be hemorrhagic areas. The liver was of a deep-brown

color generally, but its upper surface was paler. The organ presented a finely granular aspect. The gall-bladder could not be seen projecting from the anterior edge, and careful examination revealed, in a recess on the under surface, only a greatly shrunken and flaccid structure. A bristle introduced into the papilla in the duodenum passed freely upward toward the transverse fissure of the liver. The duct was found to be continuous with the cystic duct, passing onward with a sigmoid curve to the empty gall-bladder, which was found collapsed and misplaced. No trace of hepatic duct could be found except a thin, white cord. The liver, which was tough on section, presented no appearance of dilatation of the ducts. In the neighborhood of the duct and of the transverse fissure of the liver were a number of enlarged glands presenting a deep-brown color resembling that of the spleen, and there were also glands in the abdomen not so much enlarged but similarly colored. Microscopic examination showed an extraordinary degree of cirrhosis of the liver.

**A New Division of the Movements of the Heart.**—As the result of a physiologic study SCHLEIBER (*Zeitschr. für klin. Medicin*, B. xxviii, H. 5, 6, p. 402) has arrived at the conclusion that every revolution of the heart in circulatory activity presents three phases: (a) systole, (b) relaxation, and (c) distention with blood, dilatation, true diastole. In the action of the heart separated from the circulation and removed from the body, but two phases are discernible, *i. e.*, systole and relaxation. The rigid heart that has ceased acting represents a condition comparable to the relaxation of the living heart. The designation of a cardiac "pause" is not only superfluous, but embarrasses an intelligent conception of the individual phases of the heart's cycle. The successive or synchronous occurrence of the heart's movements in the several parts of the heart (auricles and ventricles) during a cardiac revolution are as follows: At first occurs the auricular systole and, at the same time, the ventricular diastole; then ventricular systole and, at the same time, after a scarcely appreciable auricular relaxation, a protracted auricular diastole continuing throughout the period of ventricular relaxation that follows the ventricular systole and up to the beginning of the auricular systole indicative of the beginning of the succeeding cardiac revolution. A change in the form of the heart and in the position of the apex appears not first during the systole but during the third phase, that of true diastole, inasmuch as the flattened-cone shape of the relaxed heart is transformed during this phase of distention with blood into that of a cone with a round base, and the apex of the heart is raised during this phase from its basis of support so as to assume a vertical position with relation to the plane of the base of the heart.

**Tuberculosis of the Spinal Cord.**—HASKOVEC (*Archives de Neurologie*, September, 1895) has reported the case of a woman, 22 years old, who presented slight symptoms of pulmonary disease, together with tingling and pricking sensations in the lower extremities and slight weakness. The weakness, after the lapse of some three months, rapidly increased in the course of a few hours to almost complete paralysis, with enfeeblement and soon abolition of the reflexes and retention of urine and

feces. Tactile sensibility was preserved in the lower extremities and upon the lower part of the abdomen, but there was complete analgesia, with thermo-anesthesia. In the course of a few weeks tactile sensibility also was lost and muscular atrophy was apparent; and similar changes showed themselves in the upper extremities. Death took place a few weeks later. Post-mortem examination disclosed the evidence of advanced pulmonary tuberculosis, with extensive disease of the spinal membranes and cord, the lesions being most marked in the upper dorsal region, especially about the posterior roots; the infiltration was partly diffuse, partly nodular.—*British Medical Journal*, No. 1816; Epitome, p. 61.

**Diphtheria of the Cutaneous Surface.**—FLESCH (*Berliner klinische Wochenschrift*, 1895, No. 43, p. 935) has reported the case of a girl, 2½ years old, who was accidentally burned with hot water upon the face and trunk. The lesion varied in severity in different places, being most profound upon the trunk. Under treatment with 2 per cent. salicylated vaselin marked improvement resulted in the course of a week. At the end of this time the mother kissed the child upon the neck and on the following day presented symptoms of diphtheria, passing through a well-pronounced attack. A sister and the husband also suffered attacks of diphtheria. In the course of three days the child presented in the situation touched by the mother's lips a circumscribed, whitish, swollen area surrounded by edema, from which on cultivation diphtheria-bacilli were isolated. The throat showed no evidence of involvement. Two injections of antitoxic serum of 100 immunity-units each were made, but without appreciable effect. Slight paralysis of the palate appeared as a sequel.

**Two Consecutive Attacks of Scarlatina.**—SEQUEIRA (*British Medical Journal*, No. 1820, p. 1232) has reported the case of a boy, five years old, who suffered from two attacks of scarlatina in rapid succession. In the first the rash was well marked, the temperature high, and the tonsils swollen and injected. The disease pursued a moderately severe course, and desquamation began about the ninth or tenth day, and continued until the eighth week. Two weeks later, recovery having apparently taken place, the patient while out of doors was overtaken in a shower of rain, and during the night complained of sore throat and vomited twice. On the next morning the tonsils were congested and much enlarged; the temperature was 104°, and a punctate scarlet rash appeared on the chest and back, and soon spread over the whole body. The second attack was rather more severe than the first. Desquamation commenced about the end of the first week and lasted until about the end of the eighth.

## THERAPEUTIC NOTES.

**A Case of Bromid-intoxication.**—BRUCK (*Deutsche med. Wochenschrift*, 1895, No. 45, p. 753) has reported the case of a woman who took 300 grains of potassium bromid in five equal parts in the course of thirty-six hours. After the ingestion of the third dose the patient felt languid and apathetic, and these feelings became more pronounced with the succeeding doses. The mind became



obscure and confused, and the eyelids could be held open only with difficulty. A sense of dull pressure was referred to the temple and forehead. The ears felt as if displaced, and sounds appeared to be distant, although all that was said was comprehended. Tactile sensibility was benumbed. A bitter, burning taste was felt in the mouth and pharynx, but there was neither nausea nor vomiting. The appetite was unimpaired, although the patient had no inclination to partake of food. All movement required a distinct effort. There was an absence of drowsiness. The pupils were contracted and reacted sluggishly to light. The pulse was 62 per minute, the respiration 16, the temperature 98.2°. In the course of a few days uniform elevations and hyperemic efflorescences appeared upon the skin in various situations, notably on the face, the forehead, and the chest and back.

In the Treatment of Uremic Convulsions the following plan is recommended by MALBEC (*Rev. Internat. de Méd. et de Chir. Prat.*):

1. Removal of ten or fifteen ounces of blood, to be repeated if necessary.

2. Inhalations of chloroform until the convulsions are controlled.

3. Administration by enema of a mixture of

Musk . . . . .	gr. viijss.
Chloral hydrate . . . . .	gr. xlv.
Yolk of egg . . . . .	No. j.
Distilled water . . . . .	f℥v.

4. Administration hourly of a tablespoonful of a mixture of

Strontium bromid. . . . .	℥j.
Sirup of orange-flower . . . . .	f℥jss.
Distilled water . . . . .	f℥ij.

5. Restraint of thighs and legs wrapped in cotton. Absolute milk-diet.—*Frauenarzt*, 1895, No. 11.

**The Treatment of Akromegaly with Pituitary Extract.**—At a recent meeting of the Société Médicale des Hôpitaux, MARINESCO (*Mercure Médical*, 1895, No. 46, p. 550) reported three cases of akromegaly treated with pituitary extract. The first case was in a woman, fifty-three years old, in whom the first symptoms of the disease had been observed nine years previously; the second in a man, fifty-four years old, in whom the disease had existed for eight years; the third in a woman, thirty years old, who had been epileptic, and whose symptoms had begun nearly five years before. All three presented paroxysmal headache, visual derangement (concentric narrowing of the field in one, slight hemianopsia in the second, and well-defined hemianopsia in the third, in which there existed also diabetes mellitus). In the course of treatment headache and other pains disappeared, and the general state was much improved. There was increased freedom of movement of the extremities and perhaps some diminution in volume of the soft parts. In addition there occurred noteworthy diuresis.

**Cold-water Enemata in the Uremic State.**—FOXWELL (*Birmingham Medical Review*, vol. xxxviii, No. 207, p. 257) attributes the uremic state to the abnormal retention of

waste products in the blood and to excessive peripheral contraction producing stasis of blood in the brain. Holding this view he was led to try the effect of simple dilution of the blood with a bland fluid, in order to lessen the concentration of the poison, with a consequent lessening of the peripheral contraction. He reasoned that by this means the brain would be more fully supplied with blood, and this would be of a better quality; and that the dilatation of the renal arterioles would allow a greater flow of blood through them, with a consequent increased excretion of morbid matter. To effect this purpose a half-pint of iced water is injected into the rectum every hour, in conjunction with such other treatment as may seem indicated.

**Cobalt as an Antidote to Cyanid-poisoning.**—ANTAL (*Physiol. Stud. aus der Univ. Budapest*, 1895) has shown experimentally that the salts of cobalt are the best antidotes to poisoning with the cyanids. Cobalt nitrate forms with potassium cyanid a non-toxic salt, potassium and cobalt cyanid, small doses of the nitrate sufficing to neutralize large amounts of the cyanid. The physiologic activity of the salts of cobalt depends upon the concentration of the solutions employed. Solutions of from ¼ per cent. to 1 per cent., which are capable of counteracting the effects of lethal doses, exercise little influence upon the heart and upon the red blood-corpuscles. In cases, therefore, of poisoning with potassium cyanid it is recommended that from 10 to 30 c.cm. of a ¼ per cent. or 1 per cent. solution of cobalt nitrate (gr. ¼—gr. ivss?) be administered both by the mouth and subcutaneously.—*Therap. Wochenschr.*; *Nouveaux Rem.*, No. 21, 1895.

**Amygdophenin** is the name given to a substitution-derivative of paramidophenol that appears as a grayish-white, crystalline, light powder, soluble in water with difficulty. STÜVE (*Centralblatt für innere Medizin*, 1895, No. 46, p. 1113) reports the results of clinical observations that show the new product to be exceedingly useful in the treatment of acute rheumatism; of some value in the relief of neuralgic pain; and of little or no use as an antipyretic. The dose employed was gr. xv once or several times daily, up to ℥jss, given in powder or compressed tablet. Bad effects were not observed. Exceptionally vertigo, ringing in the ears, and sweating occurred.

**Pilocarpin for Aural Vertigo.**—LEMAITREY (*Ann. des Malad. de l'Oreille, du Larynx*, etc., T. xxi, No. 11, p. 420) has reported the case of a man, twenty-nine years old, presenting symptoms of Ménière's disease, or aural vertigo, in which relief was afforded by the subcutaneous injection of pilocarpin nitrate. A 1 per cent. solution of the drug was employed, and gr. ⅙ was injected daily in the morning before breakfast, the patient remaining in bed throughout the period of sweating.

**For Hyperidrosis:**—

R.—Balsam. Peruvian. . . . .	gr. xxiv.
Acid. formic. } . . . . .	aa ℥j.
Chloral hydrat. } . . . . .	
Alcohol. . . . .	f℥v.—M.

S.—Apply topically in spray or by means of cotton tampons. —HEUSNER, *Semaine Médicale*.

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## HEROISM AFTER THE BATTLE.

THOSE who were at a safe distance from the battle always seem to know much more about how it was fought than those who were actually engaged. If any body of men can claim to have borne the brunt of the battle in the long and painful war against smallpox—and its sturdy ally, prejudice—it is our own profession, and yet while for three generations we have been unanimous in our belief that the weapon most relied upon in every onslaught was the point of the vaccine-lance, now that the danger is over, and the enemy not only routed from every quarter but almost annihilated, in our rear goes up a piping cry, "It wasn't vaccination that won the battle."

What it was that *did* scatter the foe the criers have never deigned to explain until just recently, when the memory of the struggle has faded and smallpox and its ravages have become merely an historic fact with most communities. But some people confuse *historia* with *hysteria*, and in the fulness of time comes one of them, a Mr. Alfred Milnes, M.A., otherwise unknown to fame, and in a most imposing essay in the last *Arena* tells us "all about the war."

It is even worse than we had hitherto been led to believe; not only had our lance-points nothing to do with the victory, but the same is true of any other weapon or weapons carried by us, and also even of ourselves. We didn't win, or even take any prominent part in the struggle. It was the "sanitary march of civilization." In other words, the moral influence of the stay-at-homes had more to do with the victory than the onslaughts of the troops in the field.

The method of supporting this colossal claim is the well-worn and familiar one of juggling with a few selected statistics just so far as they will possibly stretch, and then filling in the gap with barefaced assertions. In the first place, vaccination, it is said, has had nothing to do with the decline of smallpox, for it has "been proved a failure," because it does not absolutely protect against an attack—as if any rational physician ever claimed that it did. This claim is supported by proudly pointing to the damning record of the three epidemics in England since 1850, which carried off altogether 78,000 people—that is to say, roughly (including the outbreak of 1881-1882), 85,000 people in half a century. These figures, in the mass, are certainly appalling to the nonexpert eye, but when we remember that they represent a death-rate of only about 60 per 1,000,000 living per annum, while by the figures of Dr. Farr (which Mr. Milnes himself later unguardedly quotes), the rate for the last half of the previous century was no less than 5000 per million living per annum, that a century earlier competent observers record that one person out of every three was pitted by the disease; and that only 50 years ago more than one-half of all the inmates of our blind-asylums were blind as a result of its ravages—they sink into comparative insignificance. The fact that the disease still destroys about one-eightieth ( $\frac{1}{80}$ ) as many lives per annum as it did before vaccination is *hardly* conclusive proof of the "failure" of the latter to protect. In view of the fact that the immunity is only for a limited period, that revaccination is difficult to secure in many cases, and that the prejudice and fanaticism of thousands of such as our present essayist have had to be encountered, a "failure" of 1.2 per cent. is extraordinarily near success to the unaided eye, even granting a large credit to "general sanitary progress."

Besides, when we speak of progress in sanitation, we must remember that smallpox is not a filth-disease, although its mortality would unquestionably

be lessened by cleanliness, drainage, etc., and that the chief and almost only "sanitary measures" applied to it have been vaccination and quarantine.

Mr. Milnes also entirely neglected to mention that these epidemics, whose large lists of deaths he so triumphantly adduces in support of his belief, in most cases either started or made their chief headway and fatality in ignorant and prejudiced artisan communities, where a sufficient proportion of his unprotected sympathizers lived to furnish fuel for their flames. It, however, leaks out unintentionally in his last cited outbreak (Sunderland), where in his desperate endeavor to include some "protected" cases in the attack, he declared that the epidemic comprised 100 cases, "9 of whom were vaccinated;" the percentage of vaccinated persons in the country being about 80 per cent.!! Comment is unnecessary.

His next assertion is that not only does vaccination not prevent, but that it does not mitigate the virulence of smallpox. This he supports by a choice selection of statistics, and then proceeds to assume an air of pathologic authority, and boldly asserts that vaccination not only does not mitigate a later attack of smallpox, but *cannot*—"such a claim is without precedent in science."

In his beautiful metaphor one attack of a disease may prevent another, "but whenever such protection is overcome, and the enemy breaks through the defences, it is apt to cast off all discipline and sack the place." It is, of course, too much to expect of a pathologist of Mr. Milnes' magnitude, that he should burden his memory with such trifling "precedents" as the curative use of inoculation in tetanus, in diphtheria, and in anthrax, but he might at least have heard of Pasteur's antirabic inoculations.

His grand final *tour de force* is the marshalling of a massive array of statistics to prove that smallpox has simply shared in the declining prevalence and fatality of contagious diseases and fevers in general. By a skilful and arbitrary selection, for purposes of comparison, of a few decades during the past century, he makes it appear that between the dates chosen smallpox had actually diminished less rapidly than the "continued" fevers. In his last comparison he deliberately selects a five-year period in which an epidemic of smallpox occurred (1881-1885), for his second period, to show how small was the rate of its decline.

But even taking his own figures, and simply

comparing the death-rate at the extremes of the entire series, the deception is revealed at once. Thus in the decade, 1771-1780, the death-rate from smallpox was 5020 per annum per million, the death-rate from "fever" 6210 per million, while from 1866 to 1870 the rate from smallpox had fallen to 105 per annum per million, while that from fever had only reached 1970 per annum—a decline on the part of smallpox to 20 per cent. of its former virulence, and of "fevers" to only 30 per cent of their fatality—a difference in favor of smallpox of fifteen to one; but then a little discrepancy like this has no discouraging effect upon an antivaccinationist.

The magnificent general progress of sanitary science and intelligence has, indeed, done much to lessen the horrors of smallpox, as of all other diseases, and would have done more if it had penetrated further into the consciousness of such as Mr. Milnes and his ignorant followers. But that this alone is to be credited with the entire achievement can be overwhelmingly disproved by the very figures adduced in its support.

## EDITORIAL COMMENTS.

"Only Nervousness."—In these days of sharp competition in almost every direction it is no wonder that there is a large field for the neurologists. In the commercial world we find that, as a class, the brokers are exposed to excessive nervous strain—one day they are rich, another day poor. They live on excitement, which is but another way of saying that they live on their "nerves." Among the professions, the country doctor is often pictured as living in a ceaseless round of toil, and while undoubtedly he is called upon for much exertion, both physical and mental, we cannot but feel that the young physician of our day who essays to build up a practice and a competency in a large city is subjected to a much greater strain in his struggle for existence. If he would succeed, not only must he effectually cope with the rivalry of his fellow-physicians, and live down the dispensary-abuse, but he must give clinical instruction, participate in the proceedings of the various local medical societies, write numerous medical papers, and attend to a host of other things.

This incessant strife for a livelihood involves an amount of nervous strain which should bring home to us with a sense of personal concern the importance of a condition which physicians are continually besought to relieve, and which they are prone to carelessly diagnose as "only nervousness," and straightway to dismiss from their minds. Such a diagnosis is on a par with the common use of the terms "malaria" and "nervous prostration;" and while it serves as a cloak for the ignorance or indifference of the physician, it also obscures the true seriousness of the condition, and deprives the



sufferer of the relief which medical science and the healing art can and should afford.

It is to this phase of the subject that we desire to direct attention, and we cannot do better than refer to some of the suggestions thrown out by Dr. Herman Canfield in a paper recently read before the Society of Alumni of Bellevue Hospital. After calling attention to the "length, depth and breadth of that glib phrase—'only nervousness,'" this writer makes an eloquent plea to physicians not to turn a deaf ear to the "only nervous"—or, as they are too often dubbed, "cranks"—but to sharpen their wits and bring their best energy to bear upon the difficult problem before them. "Do not tell the patient," he says, "that it is all foolishness, and that nothing terrible is going to happen, for she knows that already; but endeavor by systematic and painstaking inquiry and observation to unravel the tangle of cause and effect, and from the many disturbing elements try to discover the true cause of the nervousness." In doing this, one should, of course, draw out the essential points in the family-history and in the previous history of the patient, but it should be remembered that a quiet half-hour of observation of the patient, when the latter does not suspect it is going on, is worth more than any amount of direct questioning. These individuals, as a rule, become nervous not from any one distinct cause, but from a gradual dropping one after another of the links in their automatic life, thus throwing into prominence symptoms which are really exaggerated traits of the true character. It is not right, therefore, on discovering the existence of a slight inequality in the muscles of the eye, or of some abnormality in the nasal passages, or of phimosis, or an enlarged or adherent clitoris, or of pelvic disease, to jump to the conclusion that this condition is the prime cause of the nervousness. It is quite possible that the nose may be a little out of line or the uterus tipped slightly out of the usual position without giving rise to any symptoms; and when it is remembered how seldom are the nervous symptoms relieved by operation for pelvic disease until the symptoms themselves have also been treated, it is evident that we should search long and deeply for the cause rather than to seize rashly upon some slight abnormality for an explanation of the diseased condition of the nervous system. It is fashionable to ascribe all sorts of affections to overwork, but it has always seemed to us that worry rather than work is responsible for most of the mischief done.

In the paper referred to, the author gives a most graphic description of the steps by which a young girl commonly reaches that pitiable condition so lightly spoken of as "only nervousness." It is well known that young girls or young women are most likely to be so affected, and this may be readily explained by their greater impressionability, their education and training, and their mode of life. How often do we see delicate, anemic, high-strung nervous girls spending many hours each day in school, often without any lunch, or with a lunch of chocolate-cake or pastry, and then going home to spend more weary hours in preparing the school-lessons for the next day! They have had no recreation and no exercise in the fresh air, and are so tired that they can hardly eat, to say nothing of digesting, their evening meal; but that does not hinder them from going out in the evening to exciting entertainments or

plays at the theaters. Amid such toil and dissipation, with no opportunity for proper rest and recuperation of nerve-force, with imperfect digestion, and, therefore, failing nutrition, how can nature be expected to produce a healthy, well-developed and properly balanced individual? She cannot, and does not. Of course, such improper training and environment tell most upon the young girl just budding into womanhood who, as Dr. Canfield aptly says, is usually "full of purity and innocence, and replete with ignorance as to her physical make-up." It is just at this time that the family-physician is called upon to treat the anemia, the amenorrhea, the dysmenorrhea, or the menorrhagia, which is nature's protest against this monstrous foolishness or gross negligence on the part of parents and guardians.

But to return to the management of these cases of nervousness. Having gained the confidence of the patient, and studied every minute detail, the cause or causes will be usually detected, and then the treatment may be begun. One of the first propositions laid down by Dr. Canfield in considering the treatment is the importance of demonstrating to the patient the futility of drugs or external means, and the fact that a successful issue depends chiefly upon herself. The whole life should be carefully regulated, and a change of environment and associations at once instituted. This is in itself a great help, for sympathetic friends rather serve to deepen false impressions, and among strangers the patient will feel a healthful moral restraint. The patient should be well fed—indeed, overfed—on a most nourishing and digestible diet, and should be especially cautioned not to pay any attention to symptoms that may arise, or may be supposed to arise from taking certain articles of food; for in a nervous person the feelings "should seldom be consulted, and never relied upon." A neglect to insist upon this has often made all the difference between success and failure. When the patient is very weak, rest in bed should be prescribed, and the needed exercise furnished by massage; but after the strength has returned sufficiently to admit of more exertion, the patient should be compelled day by day to do a little more, until finally vigorous outdoor exercise, such as riding horseback or on a bicycle, may be indulged in. The main points in the treatment are: (1) The physical restoration of the weakened nerve-centers; and (2) the education and discipline of the nerve associations.

*The Tubercle-bacillus as a Human Benefactor.*—In the November number of the *Dietetic and Hygienic Gazette*, Mr. Lawrence Irwell endeavors to show that the tubercle-bacillus is a benefactor of the human race, and that its extermination would have a detrimental effect upon the world at large. He contends that the larger portion of the community is made up of the "unfit," from an evolutionary standpoint, who marry and procreate from sexual rather than natural selection, and that this class includes those of a tuberculous diathesis. Such individuals are exceedingly prolific; but to counteract the baneful result of this state of affairs the tubercle-bacillus rapidly destroys the mother and her offspring. The remedy proposed is the education of the people in order to prevent marriage among those "unfit" from any cause.

While there is a modicum of truth in these several propositions, there is enough of fallacy to lead to incorrect

conclusions. In the first place, we cannot admit that infection with or escape from tuberculosis (or other infectious disease, for all infections are alike in requiring a certain susceptibility upon the part of the individual) may be made the criterion of "fitness" or "unfitness." Tuberculosis is a disease from which recovery is not only possible but even common; while exemption may be overcome by exposure to given conditions. The tubercle-bacillus only develops where the soil has been brought to a certain grade of cultivation and fails to secure lodgment under opposite circumstances. Further, the offspring of tuberculous parents are not necessarily "unfit." Suitably surrounded they may reach a state of vigorous growth and robust health.

We fear that a logical application of the principles advocated by Mr. Irwell would lead to a test-exposure of all individuals to infection with the tubercle-bacillus (and other pathogenic microorganisms), and any that escaped would fall into the class of the "fit." We can agree to a voluntary restriction of marriage among those that manifest morbid physical or mental tendencies, and cordially indorse the proposal to disseminate this view as an educational measure.

While directing efforts to increasing the resistance of the individual to the invasion of disease, we must not neglect as far as lies in our power to limit the dissemination and diminish the virulence of its active causes.

*The Billings Testimonial and Presentation*, an account of which is given in another column, was a unique and epoch-making event. To have conceived and to have carried it out will always be held by the profession as of the greatest credit on the part of Dr. S. Weir Mitchell. The heartiness of response in England and America testifies to a distinct advance in clearness of the professional consciousness, and to a feeling most worthy of congratulation. By it all there comes to light the fact that the heroism thus celebrated and rewarded is, as we have intimated, of a unique variety, and that this is its first clear recognition. The medical literary hero has never before been known, or at least not pointed out. But in very truth is there in all the world more genuine heroism than that in which one thus toils for many years with daily persistence and against ever-recurring difficulties to lessen the labors of thousands born and unborn, and to place medical literature and medical science on a vantage-ground whence we may all better carry on the long warfare against ignorance and disease? There is just as much genius, there is often more, required and expended in collating, classifying, and fittingly presenting the work of others, than in original research or in other work called, or miscalled, "original." Assuredly our gratitude to such lonely and tireless workers should be unstinted, and on this occasion it was so. One enjoyed the delightful generosity with which Dr. Billings honored his assistants as equally worthy with himself, and that with which the principal of these assistants, Dr. Fletcher, gave back all the honor to the friend and chief. Above all was the glad and affectionate pride the goodly company had in the new hero, and the common enjoyment of the noble emotion of unselfishness and delight in professional progress. Dr. Fletcher's explicit concession to Dr. Billings of the entire honor of the conception of the *Index-Catalog* effectually disposes of any claim of the kind by another.

In view of the large number of contributors to the testimonial, rendering it difficult to make proper acknowledgment to each without much delay, Dr. Billings has asked us to assure each and all of his friends of his profound appreciation of the fact that this is the highest honor that could be given him, and to return his heartfelt thanks.

*Syphilis through Flea-bite.*—Jonathan Hutchinson, in the last (October) number of his unique and valuable *Archives of Surgery*, reports a primary lesion of most unusual origin.

An elderly member of the profession presented himself covered with an evidently syphilitic eruption, which rapidly disappeared under the use of mercury.

The only interest about the case was the question as to how the disease had been acquired. The doctor was evidently anxious to give all the information in his power, but was positive that he had never been exposed to any sexual risk, and, as he had retired from practice, no possibility of infection in that manner existed. He willingly stripped, and a careful examination of his entire surface revealed no trace of lesion whatever on the genitals, or at any point, except a dusky spot on one leg, which looked like the remains of a boil. This the doctor stated had been due to a small sore, the dates of the appearance and duration of which were found to fit exactly with those of a primary lesion. There had also been some enlargement of the femoral glands. He had never thought of the sore in this connection, but remembered most distinctly that it followed a *flea-bite* in an omnibus, and had been caused, as he supposed, by his scratching the place, though he could not understand why it lasted so long.

Mr. Hutchinson concludes that all the evidence tends to show that the disease had probably been communicated from the blood of an infected person through the bite of the insect. It thus appears that even the proverbially trivial flea-bite may prove a serious injury at times.

## SPECIAL ARTICLE.

### BANQUET AND PRESENTATION IN HONOR OF JOHN S. BILLINGS, M.D., LL.D.

The American subscribers to the Billings Testimonial met at the Hotel Bellevue, Philadelphia, November 30, 1895, at 7.30 P.M.

Following the discussion of the menu, Dr. S. WEIR MITCHELL, Chairman, after a few pleasant introductory words, called upon PROFESSOR J. M. DaCOSTA, of Philadelphia, who said that he felt keenly the responsibility of speaking on behalf of the Committee, and of representing so many distinguished men, both in America and in England. He was, he further said, gratified that henceforth Dr. Billings was to be connected with one of our greatest institutions, and that hereafter he could be greeted, not only as a most distinguished member of our profession, but as a most distinguished Philadelphian. Dr. Billings, he continued, has many claims to distinction: he is well known in hygiene, he is a hospital-constructor, he has written a dictionary; but above all he is the author of the greatest index-catalog of our day,

which has now reached sixteen volumes, with over 300,000 books and articles catalogued, and cross-references to over 800,000.

Commenting upon the enormous labor of such a task, the speaker referred to what Scaliger said of the bibliographer, the dictionary-maker, and the index-maker: that it was worse than toiling in the mines or at the anvil; and that a French author, in this connection, had said: "If there be an odious crime on earth; if any one has blasphemed the gods or killed his father, let him make a dictionary as punishment!"

Dr. Billings has made a dictionary, and has made an index, and yet he does not regard either of these tasks as a punishment, but speaks of one in his preface as "a labor of love." This seems the most extraordinary pathologic development of the amorous instinct on record! For a man to love so constantly for sixteen years, embracing in that love eight-hundred-thousand persons at least, is certainly something almost beyond belief!

Dr. Billings has done the whole of literature, the whole of science, a great good by this unselfish work, which has been of the kind that builds up literature and science indirectly by removing obstructions and saving time. Let us give thanks also to his able coadjutors, to Fletcher, his learned colleague, to another friend who is with us to-night and who helped to read proof, to the indefatigable Chadwick, who, whenever any work is to be done of a public kind, is sure to be in the midst of it. This work will continue for generations and generations to be a benefit. It is a great national credit; an illustration of what a powerful and rich government can do; an illustration of the tact and sagacity of the men successively in charge of the Surgeon-General's office. It is a credit alike to the nation, to the corps to which Dr. Billings belongs, and to the medical profession.

Dr. Billings has been justly honored all over the world, having been made an Honorary Member of the University of Munich; a Doctor of Laws of Dublin and of the University of Edinburgh; a Doctor of our own Harvard, and a Doctor of Civil Laws of Oxford. It cannot be said that he has not received just recognition; indeed, with reference to Oxford, it is reported that he was recognized there in more than one way; that when he went up to Oxford to receive his degree, clad in red robe and purple gloves, the students, recognizing that there were some other qualities in him lurking under the solemnities, broke out in loud cries of "Josh Billings!"

The great lexicographer, Dr. Samuel Johnson, said that the life of the bibliographer was one of constant work without the least thought of possible reward; to escape censure was all that could possibly be hoped for. But if Dr. Samuel Johnson were here in this goodly company to-night—in his brown coat and brass buttons, after having swallowed enormous quantities of fluid, and eaten, as was his wont, like a tiger—he would think that, at the end of the Nineteenth Century, things were very much better, and that, in a new country, talent and ability and industry were duly honored. And if Dr. Billings were to choose one occasion of all his life that he would like best and most constantly remembered, I believe fully it would be this—to-night here among his friends, among men who have come from long distances, among his associates, who are all only too glad to do him honor. The memory of this meeting must, indeed,

remain with him to the end of his days, and his children's children will tell each other of to-night.

DR. S. WEIR MITCHELL then said that after hearing how good a speech a man could make who was altogether unprepared, they would hear how bad a speech a man can make who is entirely prepared. He alluded to Dr. Da Costa's reference to the great power of a government to assist a noble project, such as Dr. Billings has brought to a satisfactory conclusion, and remarked that it was a pity that our republican form of institution lacked all methods of systematic remuneration for any man except the soldier and the lawyer, to both of whom it can give promotion, high place and reward, though they may have done little in comparison to that which has been done for mankind by two score men at this table to-night.

He spoke of a dinner attended in London as far back as 1853, when he dined with "several reasonably obscure people"—a Mr. Jenner, a Mr. Paget, a Dr. Quain, also a Mr. Carpenter, who was then rising into note and was older than the others. The speaker commented upon the fact that all of the men named are to-day, or have been, baronets; that all of them have been attendants upon members of the Royal family—all on the Queen, he thought; that all were decorated in some way, Knights of the Bath, etc. This he contrasted with the practice in our own country, where there are no fitting marks of distinction to point out to the mass of mankind who are the best, and to indicate this in some formal way. In this connection he said: "When I think of the work that has been done by men like Flint, Da Costa, Osler, or of lives like those of Atlee or Sims, or of what my friend Welch has done in pathology, or the brilliant achievements in surgery of a man like Henry Bigelow, or of the recent distinguished addition to the despairing surgery of the prostate—I mention no name—and know how small are any but the commercial rewards, which are surely the smallest for this sort of thing, it makes one feel that there is nothing for us to do except occasionally to meet together as we are now doing, to say what we think about men like the honored friend of many years, whom we have here to-night as guest."

He referred to a recent meeting of the National Academy of Sciences, at which, for the first time in the history of that association, it took courage to say to two of its members: "You have done noble and great things, and we wish to congratulate you upon them." It turned on this occasion to Professor Lesley, of this city, and congratulated him warmly upon having finished the 124th volume of the Geology of the State of Pennsylvania; it turned to Dr. Billings, getting a little ahead of us, and congratulated him on the noble library which he created, and the catalog which he has just brought to satisfactory completeness. Neither has the profession of medicine shown any tendency in its societies or in its central association to point to its greatest men and thank them in any manner or in any way. This should have been done long ago for more than one who has gone unthanked to the world where all accounts are settled.

Dr. Mitchell read extracts from a number of letters received from Great Britain and the United States, speaking in the highest terms of praise of Dr. Billings' work.

"There was but one hitch in all this," he said. "My friend, Dr. Lauder Brunton, having collected a very con-



siderable sum in and about London, sent me a draft which was drawn to the order of Samuel Weir Mitchell. Now the bank refused to pay the draft, because that is not my name, and when I came to inquire as to how it was that my old friend had made this mistake it turned out that in this great catalog of Billings, where there are no mistakes, my name is written Samuel Weir Mitchell!

"I am not going to say anything about the character of the work done which brings us here thankfully to-night to represent about 250 of the members of the profession in America and Great Britain. You have been told in language better than I can use what is the reason of our meeting. It becomes now my pleasant duty to place in Dr. Billings' hands the gift of a silver box which contains a check for \$10,000, and which has engraved upon it, 'To John S. Billings, from 259 physicians of the United States and Great Britain in grateful recognition of his services to medical scholars.' On the side of the box there is, in Latin, a statement to the effect that he who has made a catalog of a great library has created a memory of the wisdom and learning of the past.

"In offering this box to my old friend, and the gentleman you desire to honor to-night, I would say that while the silver box contains this practical recognition of his services it also contains something more, as my imagination figures it. You all remember that phrase of Dr. Johnson's, 'Wealth beyond the dreams of avarice.' There is, as I think of it, within this box, for an imaginative man, that wealth which represents the good feeling, the friendly opinions, the thankfulness, of the scholarship of two continents. Also I may say that this wealth represents a noble avarice, of that kind which my friend has shown all his life—a desire to be loved and respected by those in our profession whom men most rightly honor."

DR. JOHN S. BILLINGS said: "I think that not the most eloquent speaker among you would feel himself at all able to make a fitting reply to the addresses to which you have just listened. It is impossible for me to do so, and I can only say that I thank you all from the bottom of my heart. To judge from my own sensations, that is not going very deep, because to me my heart seems at present to be in the neighborhood of my larynx.

"Of course, in this honor I am, in a way, but a representative, a large part of it being due to individual personal friendship and good will. The work has been rendered possible by the cooperation of many men working for many years, and a very large number of those men I see around this table. Besides, a very large part of this has not been due to individual merit, but, as you know, to opportunity."

Dr. Billings referred particularly to the cooperation of Dr. Chadwick and Dr. Fletcher. He explained that early in his medical experience he had occasion to look up the literature on the subject of the surgical treatment of epilepsy, and he was unable to obtain French journals to verify references. A canvass of New York, Philadelphia, and Boston, only resulted in obtaining one-half the journals, and Dr. Billings conceived the desirability of a library where all information of this character could be obtained. After the war, being placed on temporary duty in the Surgeon-General's Office, it seemed to him a very judicious time to get together some books for the library. At that time there were only two bookcases

in the office which constituted the library. The long and arduous difficulties and labors attendant upon the enterprise before it reached assured success, as also in establishing the catalog, were briefly recapitulated by the speaker.

"As to this gift, I accept it in the spirit in which it is given; I cannot yet say how it shall be used. It represents power; it represents the power of getting knowledge; the power, perhaps, of developing knowledge and increasing it. I will endeavor to use it in a way that will perhaps be satisfactory to those who have contributed it.

"In conclusion, gentlemen, I beg of you to accept my warmest and heartfelt thanks, and the assurance of my appreciation of your kindness."

The Chair then called upon DR. J. R. CHADWICK, of Boston, who said:

"Before fulfilling the role which you have assigned to me of alluding to the merits of Dr. Billings' able collaborators in carrying out the stupendous work of which we meet to celebrate the completing, I want to testify to the gratification that we New Englanders always have in gathering to do honor to your distinguished men. I am here reminded of the words of a famous orator, Rufus Choate, of Boston, in addressing a similar audience in this city many years ago. 'It gives me great satisfaction,' he said, 'to honor, by my presence here to-night, the two most distinguished sons of Pennsylvania—Benjamin Franklin, of Massachusetts, and Robert Morris, of New York.' May I not add another to the galaxy in naming Dr. Billings, of Washington? This phrase may be interpreted in more than one way, but I prefer to assume that the orator meant to imply that you had the discernment to recognize the merits of genius wherever found, and the ability to offer them such inducements as would lead them to become citizens of this metropolis.

"As Librarian of the Medical Library of Boston, and a warm personal friend of Dr. Billings, I have had many opportunities of appreciating the rare combination of qualities in Dr. Billings which has fitted him to conceive the task of creating from a very small nucleus the immense library over which he till recently presided, and then making an index-catalog of it more comprehensive in scope and more perfect in detail than any catalog hitherto made in any special branch of science. In proof that this praise is none too great, I would call your attention to the reasons emblazoned in letters of gold upon the honorary degree conferred upon him by the University of Munich (the translation from the Latin is mine):

"A man who deserves of his country and of literature the highest praise, not only for his numerous important writings on the relations of physicians, on the proper construction and administration of hospitals, on the public health in the United States according to the precepts of the science and art of hygiene, on the preservation and improvement in the health of the army, but also for the great collections thereto relating, which he has established and extended; a man, who in the *Index Medicus*, of which he is editor, includes, by indefatigable industry, all the branches of medicine that are being advanced throughout the whole world, who, also, as author of the book that is entitled the *Index-Catalog* of the Library of the Surgeon-General's Office, United States Army, which, by the remarkable munificence of those who control the Government of the United States, has

been laid before an immense number of learned men, has entitled himself to the gratitude of physicians and students of history throughout the whole world, and has built for himself a monument more lasting than brass.

"All who consult this catalog can perceive its merits; but few can appreciate the incessant labor bestowed upon it by Dr. Billings; no one, in fact, who has not, as I have, had the privilege of being his frequent guest during the past sixteen years and seen him sit down night after night at eleven o'clock with a pencil in his hand and a huge basket of current journals in all languages by his side, and, taking up one after another, run his eye over every outside and check those that were worth cataloging—about four out of every five. This is but one of the many stages in the work to which he gave his personal attention.

"It is not for me to be his panegyrist on this occasion; but there is one direction in which his influence has been felt throughout the length and breadth of the land which others might fail to note. I allude to the extent to which the formation of the Library of the Surgeon-General's Office and the publication of its catalog have stimulated the formation of medical libraries in every large center of population. This in itself entitles him to the gratitude of this and future generations of medical men.

"One of the most valuable of his many qualities has been his common-sense. 'He is like a pin,' to use a Frenchman's simile, 'in that his head prevents his going too far.' His knowledge of men and his ability to secure their enthusiastic cooperation form the secret of much of his power. For instance, he not only despoiled my private library of many of its treasures in the early days of our acquaintance, but persuaded me to listen with equanimity, when, as at the dedication of the medical library in Boston, he boasted of the fact publicly, and intimated that the experience had doubtless proved a valuable object-lesson for me as a librarian. Mr. Thomas Windsor, formerly Librarian of the Manchester Medical Library, in England, is another who has succumbed to his wiles, and from the beginning has sent box after box of medical rarities culled from his extensive private library, and this, despite the fact that he is the most inveterate collector and reader of books, and has a more intimate knowledge of their value than any living man. We are but types of his many victims.

"The effect upon the *Catalog* of this quality in Dr. Billings is made manifest by the ability and indefatigable labors of his subordinates. No one familiar with the workings of the library can help being impressed with the exactitude and unfailing courtesy of Mr. F. W. Stone, who keeps the books and carries on the multifarious correspondence; with the energy and executive ability of Mr. C. P. Clarke, who has general supervision of the clerical work; of the genial, cultivated persistence of Mr. Edward Shaw, who, despite his many years and independent fortune, labors early and late to complete the files of periodicals. I cannot repent my weakness in sending him from my private collection last year, after many years of solicitation, the number of the *Gazette de Jardine* lacking to complete the file of that journal, when I realize that it is to him chiefly, owing to such persistence, that the periodicals in the library now number 29,000 volumes, and is the largest collection of medical

periodicals in the world. I have no personal acquaintance with the other employés, such as Mr. W. T. W. Moritz, who, as chief cataloguer, writes and revises the cards and compares them with the titles of the books; the late Mr. F. L. Apel, who was in charge of the library in 1865, then numbering 800 volumes, and who kept the library in order in the two little bookcases, and sent patients to the Providence Hospital; he subsequently became clerk and was specially useful in revising proof, owing to his knowledge of eight of ten languages; Mr. Hardy who, as successor to the late Dr. Wise, is curator of the books; and Mr. Watson, keeper of the unbound books.

"I have reserved to the last, in order to give it deserved prominence, mention of the name of Dr. Robert Fletcher as the most distinguished collaborator with Dr. Billings on the *Index-Catalog*, and the actual editor of the *Index Medicus*. As his qualification for this work is only exceeded by his modesty, I may be pardoned for giving a few brief biographic data.

"Dr. Fletcher is of English birth, received his medical education in Bristol and London, was married at the age of twenty-one years, and brought his bride at once to America, establishing himself in practice in Cincinnati, Ohio. In 1861 he was appointed Surgeon of Volunteers, served throughout the War of the Rebellion in the Armies of the West as Medical Purveyor. At the end of the war he became an acting Assistant Surgeon, and was assigned to assist Dr. J. H. Baxter in compiling the Statistics of the Provost-Marshal General's Office relating to drafted men, a work of great value for reference for anthropometric data, much of which value is due to the accuracy and general attainments of Dr. Fletcher. In 1877, after the publication of this work, he was assigned for duty in the medical library, where he at once became the chief assistant and received the title of Principal Assistant Librarian by Act of Congress in 1891. His mental equipment to fill the important functions of this position has been continuously augmented by the fact of his private studies, which have covered a wide field, ranging from the old English poets and dramatists to modern anthropology. As proof of his attainments he has given us desirable papers "On the Vigor and Expressiveness of Older English;" "The Poet, is he Born, Not Made?" "Medical Lore in the Older English Dramatists of the Elizabethan Era, excluding Shakespeare;" and in another field, "The New School of Criminal Anthropology." He has been President, successively, of the Anthropological Society of Washington, the Philosophical Society of Washington, and the Literary Society of Washington.

"In preparing the *Index-Catalog* his assistance has been of the utmost importance, the accuracy and typographic excellence of the volumes being entirely due to his careful and skillful supervision.

"It is fortunate for the medical profession that Dr. Fletcher will remain, in the future as in the past, the editor of the *Index Medicus*. When this important publication was started he took entire charge of the editorial work, and the excellence of this record of current medical literature is wholly due to his skill and ability. We know that its revival is assured. I trust that he will tell us fully of its present status.

"One word and I am done. When Dr. Fletcher was five years old, his father, who was a lawyer, had as a

client a man possessed of a large landed estate, whose exigencies required that an insurance should be effected upon a young life. Dr. Fletcher then had the only necessary qualification, and his life was insured for a large sum. The premiums have been paid regularly ever since. During the time of Dr. Fletcher's active service in the field the premiums were doubled. When it became known in England that Dr. Fletcher was assigned to duty in Nashville, the premium was reduced to the former rate, on the ground that he was stationed 'in a walled and garrisoned town.' It seemed to me that this insurance must not be allowed to lapse, and I think that part of the funds in your hands, Mr. Chairman, should be employed to prevent the loss of this mascot. I propose a toast to Dr. Robert Fletcher of Washington."

DR. FLETCHER then said:

"I am somewhat in the position of a friend of mine, who, being in Alaska in the early days of that territory, was supposed to have been killed there. He returned, fortunately, to San Francisco, and, being a member of the San Francisco Academy of Sciences, he went to a meeting of that society, and listened with great interest to a most pathetic account of his career and untimely death. I feel somewhat in his position after having heard this very untimely obituary.

"I need not say with what pleasure I have listened to the various tributes paid to Dr. Billings. It is needless for me to add anything as to the merits of the particular work which he has been engaged in; but I can speak of it from a different standpoint from any of you—that of twenty years' daily intercourse with Dr. Billings, an intercourse characterized always by the gracious readiness he has ever shown to contribute to my insufficient knowledge.

"While the thought of a great index-catalog might have occurred to thousands of persons, there have been more than once attempts made to deprive Dr. Billings of the credit of the first conception, and, indeed, of some of the carrying out of the work connected with that index-catalog. I take the opportunity to say—and there is no man living who can speak more positively on that subject than I can—that I know positively that the first conception of this stupendous work, the planning of it, the arrangement, the classification—in short, the whole merit of it, are all due to Dr. Billings exclusively.

"My friend, Dr. Chadwick, has kindly associated my name with the *Index Medicus*, that fascinating romance of which you have all heard. It is right that I should say something on this subject. Some sixteen years ago this was commenced at the suggestion of a New York publisher. Later Mr. Davis, of Detroit, asked permission to carry it on, and it certainly has been a great credit to him and his generosity, for it was every year with a certain definite loss of money that he continued the publication; at length he tired even of that, and the journal ceased to be published last April. I think, on the whole, I was rather pleased, for I could go to the seashore without thinking whether appendicitis should be classed under diseases of the digestive system or under the surgical treatment of the abdomen. We all know that when a man dies it is astonishing how many men find out how much they thought of him, and how much they really valued him in his lifetime, although they may have done nothing to help him. So it was

with the *Index Medicus*. In the pathetic language of Erin they said: 'Arrah, then, why did you die?' The result was that those who really wanted the journal continued were asked to subscribe for it on terms heretofore unheard of in the history of medical publishing. Instead of the minimum number of subscribers we have received so many that we have begun to decline additional subscriptions, so that I have the pleasure of stating that in January next the first current monthly number will be published, and another number, as soon as the material will allow of its being printed, will cover the entire space since the cessation of the publication last spring."

DR. A. JACOBI, of New York, being introduced, rather took issue with Dr. Mitchell's views as to the better position of the profession on the other side, and thought there was not much to complain of; that everyone in actual practice in this country attends sovereigns every day. Continuing he said:

"When you, Mr. Chairman, in your irresistible and pleasant dictatorial way, told me a few days ago that I should be one of those who would speak here, I meekly submitted to what I prefer to call *your* fate. Originally I had expected to be on what you have seen mentioned in the books as a Weir Mitchell treatment, with ample rest, good feeding, and the most pleasing silence. But you willed differently, and I, 'cedo majori,' speaking for New York last, least, and briefest.

"I look upon to-night's gathering as a manifestation of great moment. As a rule, a professional man's reward for long-continued work and meritorious services consists in the universal but silent recognition of his labors. We do not, as they do in monarchical states, attach long-winded titles to his honored name; nor do we ornament his coat with insignia and decorations; nor are there many instances in which his distinction and the veneration felt for him are substantiated by a calligraphically written and embossed address or other documentary evidence. To-night, however, many of us have assembled for the purpose of proving both to the profession and the public some proof that his colleagues love to publicly honor a great and good man, whose efficient work medical men all over the world have long learned to appreciate. I trust the notoriety of this occasion (I wish there were many of the kind) will prove to the community at large the existence of the public spirit which prevails in the bulk of the medical profession and of good will toward a deserving colleague. The jealous and mercenary spirit of a commercial era must not and does not enter into the ranks of a scientific and ethical brotherhood. That spirit may be natural and congenial to the stock-exchange, the labor-market, and industrial enterprises; but—'quod licet bovi non licet Jovi'—it does not govern the motives of the most humane of all the professions. Nor is this exhibition of the spirit of the profession without its reward, for the esteem the medical fraternity is commanding among the lay world stands in due proportion to the regard we evince for ourselves, for each other, and for our achievements, rights, and duties.

"The last take the first rank in the minds of whom ever looks on himself as one of the cells constituting the living organism of science and of society. Therefore, appreciating my own duties, I try to read in the soul of our guest; unless modest to a fault, that he has the right to claim that there is no man who has been more active in



the service of the profession, and through the profession to all countries. Not a year of his life but has been filled with the results of the labors of an always seething brain. Fortunately it was warmed by a generous heart and sustained by great physical powers. Thus only was it possible to know and amass books, old and new, to gather and systematize specimens, to write history, prepare censuses, exhibit statistics of the greatest value, organize the *Index-Catalog* and the *Index Medicus*, and the Medical Museum, and always to combine the powers of a savant and of an administrator. . . .

"All of the latter are wanted in his present position. Hygienic institutes will henceforth require the best talent of the land. Modern and future medicine must rest on biology and hygiene, including as these do bacteriology. Thus far practical surgery has reaped the most beneficent harvest from their labors. Internal medicine has just begun to participate in their blessings. Antitoxins are to take equal rank with antiseptics and asepsis. Thus laboratories are the most efficient agents, both curative and immunizing, that is preventive. And the best minds should be placed at the head of the institutions destined to render experimental research subservient to suffering mankind. From that point of view I was not sorry to learn that Billings gave up his unique position in Washington to charge himself with the direction of his laboratory of hygiene. He is more than eminently qualified; for not only the best minds are required for such places, but the stoutest hearts also. A position like his is no longer a mere office; it becomes a mission. Modern medicine shares both in its objects and in its methods the dangers of a gospel. It is our present exact experimental methods that are constantly assailed by the obscurists of all countries and all stations in life. They have succeeded in almost crippling English physiology and pathology by depriving the most objective and brightest observers of any nation of the means of systematic experimentation. In our country we have had to to exercise constant watchfulness over legislatures and wary lobbyists to ward off contemplated blows against the liberty of scientific research; and the last reports carry the news of a new onslaught along the whole line. Strong conviction, eternal watchfulness, and stout resistance of closed ranks will be required to fight and defeat the sickly sentimentalists who shed tears over a rabbit while staring in stupefaction at the epidemics of preventable diseases, which slay humankind by the hundreds of thousands, and call it a dispensation of Providence. In the imminent combat against misled ignorance and semi-instructed and opinionated fanaticism, we shall require not only universal cooperation, but also the strongest voices fit to be heard in the uproar of the battle. Such a Diomedes you have secured for Philadelphia. Show us many more, so as to at least convince the millions that the world of the future should belong to man and not to rabbits, guinea-pigs, and horses.

"We should not imagine that victory will be easy; even an attack once repulsed affords no security. It is a pity that this should be so, but this uncertainty must be borne along with the blessings of our political and social habits, of which it is the direct result. Individual, political, and social life cannot be at rest and settled forever in a progressive community. We are used to unceasing agitation. Constant motion clears the atmosphere; perpetual turmoil the stagnating waters of the

ocean; and it takes a restless and never-pausing circulation in protoplasm and cells to preserve the health of organic life. Thus, if we must fight, let us do so with the conviction that through fighting only in accord with what we forever see in living matter can we work out our salvation and that of mankind. It is certainly true, as the great German proclaimed, that he only earns both liberty and life who conquers them on every one of his living days.

"I came near forgetting, however, that I am speaking before my betters, recognized masters in modern medicine, and, I trust, just as conscientious citizens of the political republic as they are leaders in that of science. There is no use carrying owls to Athens, or to speak of the duties of the medical profession to the successors of Rush and Physick. The mention of these illustrious names carries me back to where I started, to Philadelphia.

"What shall I say of and to Philadelphia and of this grand demonstration of hers, for hers it is? From what I know we should not be here without her having taken the initiative. It is but just that she should have done so, for indeed she is equally interested with all of us, and the gainer by far for gobbling up the guest of the evening as her own immediate property. She reminds me in part of what William Sterling in his life of Charles V says of Austria: "Bella gerant alii tu felix Austria nube—let others fight, Austria makes her fortune by marrying." So Philadelphia enriched herself by having Billings wedded to her. Still let us be just and admit that she never was a mere receiver and that he made no contract with a mean spouse. From the time of Benjamin Rush to the present, American medicine found a home and fertile cultivation in Philadelphia, and not a few of her medical citizens have been Rush's successful rivals in all his exertions and achievements. That is no mean praise if you refer to what is said of him in *A Century of American Medicine*, by Edward N. Clarke, Henry I. Bigelow, Samuel D. Gross, T. Gaillard Thomas, and J. S. Billings. In the article on 'Practical Medicine,' written by Clarke and R. H. Fitz, Benjamin Rush is called 'a devoted enthusiast in his profession, an ardent patriot, a lover of liberty, eminent as a physician, distinguished as a philosopher and a scholar, who, holding a high social position in the community, contributed largely to raise the profession of medicine in the estimation of the community in which he lived, and of the whole country.' I am anxious to add that this very day the ranks of Philadelphia's great physicians contain more than one man to whom that eulogy bestowed on Rush would be but a just tribute. Thus, while she may be envied because of her securing Billings, she offers no mean gift to the newcomer.

"And now a word about this newcomer and old friend. At the close of my remarks I mean to become quite personal and tell a story. Those who know me well are aware of my not committing many sins of that kind. I am even suspected of knowing no stories at all. But there are a few in my repertory, and their beauty consists in their being true—some of them. Now, there was a letter written fifty years ago, somewhere in South America. It bore the address, 'Alexander Humboldt, Europe.' That letter was not slow in finding the little great man in his side street in Berlin. In the same way the honored guest of the evening is called by me and all of us 'Billings,' not even Dr. Billings. Not in my

most melancholic dreams did it ever occur to me that he would condescend to descend to our level. I say our level, for I am afraid there are but few here so distinguished as not to be professors. Most of us, I fear, are professors, more or less. And Billings is one of us now, I am told. But I need not be told that he will remain big enough to require no title additional to that which he carried in Washington. That title was 'Billings.' And I also know that when in Europe—which, after all, is also a part of the world—and the rest of the continents, men whom we all know and revere count the very best names of all countries, one of the few will be 'Billings, of America.'"

DR. WILLIAM OSLER, of Baltimore, being called upon, said:

"I have to make the very pleasant announcement that though Dr. Billings has left Washington, and the Army Medical Museum and that the Army Library will know him no more as we have known him there, yet his counterfeit presentiment is to appear on the walls of the library. A sufficient fund has been raised to have Dr. Billings' portrait painted, and it will be presented to the Army Medical Museum."

Dr. Osler read a letter from U. S. Surgeon-General George M. Sternberg, expressing pleasure at the fact that such a handsome sum had been raised for Dr. Billings, and that his portrait was to be painted by an artist of ability, adding that the portrait, when completed, would be gladly received.

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## SOCIETY PROCEEDINGS.

### SOUTHERN SURGICAL AND GYNECOLOGICAL ASSOCIATION.

*Eighth Annual Meeting, held in Washington, D. C., November 12, 13, and 14, 1895.*

FIRST DAY—NOVEMBER 12TH.

#### Morning Session.

The Association met in the banquet-hall of the Hotel Shoreham at 10 A.M., and was called to order by the President, DR. L. McLANE TIFFANY, of Baltimore, Md. DR. H. C. BUSEY, of Washington, delivered an

#### ADDRESS OF WELCOME,

on behalf of the medical profession of the District of Columbia. In his closing remarks Dr. Busey said:

"I solicit your aid and cooperation in our effort to secure the protection of our people from the horde of impostors and charlatans which you have driven from your borders by the enactment and enforcement of medical-practice laws, and which has made the District of Columbia a common rendezvous where the most atrocious methods of the charlatan and mercenary impositions are openly and flagrantly committed, to the wrong, injury, and robbery of its citizens. You represent the most influential and intelligent class of suffragists for whose aid on the hustings and at the polls we plead.

"To state the deplorable condition of this District fully and broadly, there are five medical schools and several medical societies chartered by acts of Congress, or under the general incorporation-law authorized and empowered to license persons to practise the art and science of medicine, without any uniform, and by some without any standard of qualification beyond the ability and willingness of the applicant to pay the required fees, or give promissory notes for such payment; and under the provisions of the general incorporation-law any dozen of persons can obtain a charter upon payment of the fee for recording of the same, authorizing them as a body corporate to confer the degree of M.D. at their pleasure and will. Such is the status of this Federal territory, which is under the exclusive jurisdiction of the highest tribunal of legislation in the land, made up of the Representatives and Senators from forty-nine States and Territories, which have enacted medical-practice laws for the protection and welfare of their citizens. Take these facts home with you, and reecho them throughout the length and breadth of the land, that such criminal neglect, not less disgraceful and scandalous than the slums of vice, may not continue to afflict the citizens of the Federal territory."

PRESIDENT TIFFANY then responded to the Address of Welcome for the Association.

After some announcements had been made by DR. JOSEPH TABER JOHNSON, of Washington, Chairman of the Committee of Arrangements, the reading of papers was taken up.

DR. BEDFORD BROWN, of Alexandria, Va., read a paper entitled

#### PERSONAL EXPERIENCE IN THE TREATMENT OF STAB-WOUNDS OF THE INTESTINES AND PERITONEUM.

He stated that about 130 cases of stab-wounds of the peritoneum and intestines had come under his care dur-

*Dr. John Ridlon* has been appointed Orthopedic Surgeon to Michael Reese Hospital, Chicago.

*Prof. Riedel*, of Jena, has been elected to the Chair of Surgery at Göttingen in succession to Prof. König.

*Illness of Dr. James E. Reeves.*—The many friends of Dr. Reeves will be grieved to learn that he is seriously ill.



ing his entire professional experience in both private and military practice. In less than one-third of the cases the intestines were wounded. It was considered a little remarkable that there should be such a disproportion in the number of intestinal wounds in these cases; in other words, it is a singular fact that in a large majority of abdominal wounds the intestines escape injury even when such wounds are extensive. Transverse and longitudinal stab-wounds of the intestines were then considered at length. Dr. Brown regards the saber-wound as one of the most dangerous in its immediate and remote results. If the edge and point of the saber are sharp the wound inflicted is large and deep. The weapon cutting through the intestines and mesentery, usually passing through the abdomen, severs large bloodvessels, and causes frightful hemorrhage, which is speedily fatal. He had only seen three saber-wounds of the abdomen, and they ended fatally in a short time. The stiletto is a dangerous instrument, as it almost invariably enters the intestine or other organ. It does not kill by hemorrhage usually, but makes an opening in the intestine sufficiently large to permit the escape of a small quantity of fecal matter, causing septic inflammation. It is one of the most difficult of all intestinal wounds to detect.

The diagnosis of intestinal wounds was then dwelt upon, reference being made to Senn's hydrogen-gas test to detect wounds of the intestine. While Dr. Brown considered it a useful test, in remote sections of the country far from large cities and towns it is not practicable because of the impossibility of procuring the apparatus and generating the gas. In all abdominal stab-wounds his rule has been, after cleansing the hands and thoroughly disinfecting them, to insert the index-finger and explore the intestine to ascertain if there is an opening. In certain cases a wound may exist in the intestine, but it may be so small as to escape detection. But if the intestine is wounded, whether we can insert the finger or not, there is always more or less extravasation of fecal matter and gases, and if the finger comes in contact with this matter it is certain to retain for some length of time the peculiar odor of human feces. This will always afford positive evidence of an intestinal wound.

In treating simple wounds of the peritoneum it has been Dr. Brown's rule to close them with silver-wire sutures, after thorough disinfection. Formerly these wounds were closed regardless of antiseptic measures, except that the wound was washed with hot water and soap. On the battlefield and in field-hospitals wounds were washed with any water that was convenient, and were not washed at all when water could not be obtained. Previous to the introduction of antiseptic treatment in dressing wounds but little attention was paid to the condition of the instruments, sutures, sponges, and dressings, except the practice of ordinary cleanliness, and the percentage of cases of healing by first intention of simple wounds of the peritoneum was large. In dressing simple wounds of the peritoneum scrupulous attention should be paid to the laws of cleanliness. In treating wounds of the intestines two vital procedures are necessary: 1. Complete and thorough closure of the intestinal wound; and 2. Cleansing the peritoneal cavity of all fecal matter, blood, and gases escaping from the intestine.

Dr. Brown then described a simple method of reducing a protruded intestine in stab-wounds. He takes two long, slender, curved needles, threaded each with a silken cord 10 or 12 inches long. One of these needles is passed midway through the margin of the wound, the other through the opposite margin; and then each is tied in a separate loop. These cords are drawn in opposite directions by two assistants, upward and outward, firmly and tightly. By this means the wound is made to expand or gape widely, and at the same time the walls of the abdomen, for a large area around the wound, are considerably elevated above the intestines, while the patient reclines in the dorsal position, and a considerable vacuum is in this way created, and the intestines will glide back without force or manipulation to fill this newly created vacuum.

DR. RICHARD DOUGLAS, of Nashville, said that in peritoneal wounds we always have a mixed infection, which is more serious than infection with the colon-bacillus alone. Peritonitis, whether local, adhesive, general, or septic, should be considered of germ-origin. In closing the abdominal wound the peritoneum should always be approximated, as by so doing we lessen the danger of hernia.

DR. C. A. L. REED, of Cincinnati, expressed himself as being apprehensive about mere exploration with the finger to detect stab-wounds of the intestines. However erudite the tactile sense of the surgeon may be, at times it proves misleading, and, therefore, in certain cases it is exceedingly important to enlarge the original wound, so that part of the viscera lying immediately beneath it should be brought out and carefully inspected. He believes with Dr. Douglas that the peritoneal margins should be carefully approximated.

DR. JAMES EVANS, of Florence, S. C., related an instance in which nine men had received chest-wounds by bayonets during the war, the bayonets having been previously stuck in the ground, and yet all of the men recovered. He attributes their recovery to the form of wound made by the bayonet. In another case, a man had been shot within half an inch of the navel. He had no rise of temperature; yet when the doctor saw the patient the omentum had extruded to the size of both his hands. A double ligature was applied, a piece of adhesive plaster applied over the surface, and the man recovered. Dr. Evans had frequently seen gunshot-wounds of the abdomen during the war, in which there was extravasation of fecal matter through the wound, but unaccompanied by shock.

DR. A. VANDER VEER, of Albany, has always made it a practice to first inquire carefully as to the kind of weapon with which the wound had been made. He had seen several wounds inflicted by bayonets during the war, but did not remember having seen the intestines or stomach penetrated. There should be no delay in treating stab-wounds. The surgeon should act promptly and not wait for symptoms to develop. Just as a case of perforative appendicitis will terminate fatally in a short time, so will stab-wounds of the intestinal tract, unless timely interference is resorted to.

DR. HUGH T. NELSON, of Charlottesville, Va., said that the necessity of enlarging the abdominal wound, under all circumstances, was an imperative one. Four years ago he saw a case in which the small bowel was wounded by a knife and the patient refused operation

for twenty-four hours, believing that this viscus was not cut. The symptoms became alarming and the patient finally consented to have an operation performed. Dr. Nelson opened the abdomen by a long incision, finding it impossible to remove from the peritoneal cavity the extruded contents of the bowel, owing to the fact that an adhesive inflammation had taken place and had agglutinated them to the bowel so firmly that he could not wash them away. He attempted to resect the peritoneum into the pelvic cavity where the fecal matter had burrowed, but could not do so. Peritonitis became general and the patient died. The sooner the abdominal incision is enlarged in stab-wounds the better.

DR. GEORGE ROSS, of Richmond, Va., asked whether there was any way to distinguish between the symptoms of nervous shock and shock due to hemorrhage.

DR. BROWN replied that one of the most unerring symptoms was rapid reduction of temperature, although there is no symptom that will enable the practitioner to distinguish accurately between the different forms of shock except the gravity of the condition.

DR. W. E. B. DAVIS, of Birmingham, desired to speak upon the point in reference to injuries of the gall-bladder. The essayist referred to the fact that injury to this viscus would produce a septic peritonitis. He thought that an injury that would produce peritonitis would speedily result in death if there was a large escape of bile into the peritoneal cavity, but he does not believe it is a septic peritonitis. In the majority of cases the shock following abdominal injuries is due to hemorrhage, and that hemorrhage plays a more important rôle in the production of symptoms in intestinal injuries than has been believed. In fact, it was the hemorrhage from these wounds that frequently caused death.

DR. JOHN D. S. DAVIS, of Birmingham, expressed himself, in regard to the diagnosis of intestinal wounds, as having very little confidence either in Senn's hydrogen-gas test or the flushing method spoken of. He had seen perforative wounds of the abdominal viscera where it was impossible, from their character and location, to flush the abdominal cavity through the opening sufficiently to thoroughly clean it. In addition to the three forms of shock mentioned there should be added the shocks of sepsis.

DR. BROWN, in closing, agreed with Dr. W. E. B. Davis that all cases of violent or dangerous shock were due to hemorrhage. In regard to approximating the peritoneum, he had always left it untouched in closing simple wounds in the abdominal wall, and had found the practice a good one.

(To be continued.)

## CORRESPONDENCE.

### WHAT IS THE VALUE OF OUR MEAT-INSPECTION?

To the Editor of THE MEDICAL NEWS,

SIR: The butcher of the University Hospital at Ann Arbor, Mich., recently called my attention to a beef-liver just received with a lot of other meat from a large meat-firm. The surface of the liver showed numerous irregular or stellate scars, up to two inches in diameter. Beneath these the tissue was dense. On section we found calcified cysts scattered through the liver. These

varied from 0.5 cm. to 2 cm. in diameter, had firm walls, and were filled with dark, gritty material. All the cysts were old; no evidence could be found as to the origin of the cysts. The cysts were so numerous that a section could hardly be made through the liver without revealing one. The liver could not be looked on as dangerous to the consumer. It was not, however, inviting. It raises, I think, the question at the head of this note. Every quarter of meat received from the firm concerned bears a seal, attached to a card. The latter has on it the legend, "United States Department of Agriculture, Bureau of Animal Industry. Inspected Meat. J. Sterling Morton, Secretary." There is also a number and a letter stamped in red ink. If lesions such as were found in this liver are overlooked, how can we suppose that trichinæ, measles, or tuberculosis can be discovered by the so-called inspectors? Does not the use of the card under the circumstances tend to create a false sense of security, or is the matter one in which the public takes no interest?

Respectfully,

GEORGE DOCK.

ANN ARBOR, MICHIGAN, NOV. 11, 1895.

### THE EVERLASTING "GOLD-CURE."

To the Editor of THE MEDICAL NEWS,

SIR: I enclose a document which may have already reached you. You will notice the improvement in moral methods indicated by the circular. This gentleman proposes to have the physician who purchases the right to use the "cure" do his own lying. Hitherto this has been done wholesale, so to speak, and by institutions benevolently chartered for that purpose.

Yours very respectfully,

JOHN K. MITCHELL.

PHILADELPHIA, November 15, 1895.

[COPY.]

DEAR DOCTOR: We ask you to give the following careful consideration, knowing that the greater portion of advertising literature is thrown into the waste-basket. We have a proposition to make you, which we think should not even be "pigeon-holed," but rather considered as a good thing for your adoption:

All medical journals for years past have teemed with discussions, *pro* and *con*, on the subject of gold-cure for alcoholism. Physicians have as a rule antagonized this method of treatment, mainly from the fact that the drugs employed and the conditions imposed in these cases have been withheld from them as a body. The number of patients treated successfully by the various methods under the name gold-cure have forced the medical world to the conclusion that conditions, not theories, confront them. A leading manufacturing chemist prepares an article after a certain secret formula; he advertises through the medium of medical journals that his preparation will cure certain maladies; the physician is given knowledge of the remedy, uses it, finds it efficacious, and adopts it in his practice.

The gold-cure formula is a closed door to the medical fraternity. Pronounce the "open sesame," place it in their hands with full instructions for use, and they are compelled as conscientious healers to use it in all cases of alcoholism that may come to them.

Our proposition is as follows: Until January 1, 1896, we will furnish you with sufficient medicine (with directions for use) for the treatment of any number of cases of alcoholism at the nominal price of \$10 each, on condition that you will charge each individual case not less than \$75 for full twenty-one days' treatment.

We shall be pleased to have you become interested with us; call at our offices at any time and you will be made welcome. Very sincerely,

#### PREVENTIVE INOCULATION FOR DIPHTHERIA.

To the Editor of THE MEDICAL NEWS,

SIR: In view of the fact that the diphtheria-antitoxin is a well-recognized agent, not only in the cure but even to a greater extent in the prevention of diphtheria, it seems to me that it would be very advisable to inoculate all children visiting public schools.

It is well known that as soon as the schools open in the autumn the number of cases of diphtheria immediately rises, and if the children were all protected this autumnal increase in the cases would hardly occur.

I see no reason why preventive inoculation for diphtheria should not be practised just as for smallpox, in cases in which large numbers of children are thrown in contact with each other.

Yours truly,

B. M. BOLTON.

PHILADELPHIA, PA., NOV. 21, 1895.

#### NEWS ITEMS.

**Football-incidents.**—The members of the University of Pennsylvania Football Team, together with a host of substitutes and Woodruff, the coach; Leaman, the manager; ex-Captain Knipe; Bryan, the trainer; a cook and two "rubbers," departed this afternoon for the Berkshire Hills, where they will stay until they meet Harvard, at Cambridge, on Saturday.

Yale composers are busily engaged in the preparation of football-songs, to be sung at the Princeton game at Manhattan Field, New York, next Saturday. Three songs have been selected, and they will be sung by the mass of Yale students and sympathizers, led by the crack glee club.

One of the songs is sung to the air of "I Can Knock, Oh, No." It is as follows:

The Princeton tiger's stripes, they say,  
Are orange and coal-black;  
They run in fancy diagrams  
All up and down his back.  
But when he strikes old Eli's team  
He'll find it sad but true,  
That the only stripes upon his back  
Are black and blue.  
I can knock, oh, no,  
I can knock, oh, noke,  
I can knock, oh, no.  
Yale.

[*New York Herald* of November 20th.]

During the third scrimmage, as the Wichta team were shoving their captain through their opponent's rush line, Jenne fell, and in an instant both teams were on top of him. His head was bent under his breast, and in this position he remained for over a minute. He was picked up unconscious and carried off the field. When he regained consciousness, after half an hour, he was unable to talk, and the discovery was made that he was paralyzed from the head down. He can hardly live through the night.

After the accident another man was substituted, and

the game progressed until the end of the first half, when Captain Mason, of the Eureka eleven, was tackled while making an end run and fell on his face and was knocked into insensibility. He became delirious and had to be carried home.

As a result of the football-game at Decatur, Ill., Thanksgiving Day, between the Young Men's Christian Association, of Springfield, and the local team, William McGerron, one of the visitors, is likely to die. He went down in the scrimmage and the two elevens fell upon him. When they arose McGerron was unconscious. The attending physician fears he is suffering from concussion of the brain. McGerron's home is in Chicago, and he is private secretary of the State Treasurer.—*New York Herald*, November 30, 1895.

#### Meetings of Philadelphia Medical Societies:

	Meets.	Next meeting.
Academy of Surgery,	1st Monday of month, Oct.—June.	Jan. 6
College of Physicians,	1st Wednesday of month, Oct.—June.	Jan. 1
Section of Gynecology,	3d Thursday of month, Oct.—June.	Dec. 19
Section of Ophthalmology,	3d Tuesday of month, Sept.—May.	Dec. 17
Section of Orthopedic Surgery,	3d Friday of month, Oct.—April.	Dec. 20
Section of Otology,	1st Tuesday of month, Oct.—May.	Jan. 7
Section of Surgery,	2d Friday of month, Oct.—May.	Dec. 13
County Medical Society,	2d and 4th Wednesdays of month, Sept.—June.	Dec. 11
Neurological Society,	4th Monday of month, Oct.—April.	Dec. 23
Obstetrical Society,	1st Thursday of month, Sept.—June.	Jan. 2
Pathological Society,	2d and 4th Thursdays of month, Sept.—June.	Dec. 12

**Congress of American Physicians and Surgeons.**—At a meeting of the Executive Committee of the Congress of American Physicians and Surgeons, held in New York City, November 23d, the following officers were elected:

President of the Congress, Dr. Wm. H. Welch, Baltimore, Md.; Secretary of the Congress, Dr. Wm. H. Carmalt, New Haven, Conn.; Treasurer of the Congress, Dr. Newton M. Shaffer, New York City; Chairman of the Executive Committee, Dr. Landon Carter Gray, New York City; Secretary of the Executive Committee, Dr. Wm. K. Simpson, New York City.

The next Congress will be held at Washington, D. C., in May, 1897.

**The Revival of the Index Medicus.**—It is announced that the *Index Medicus* will be revived. The editors say further that "the replies to the inquiry made as to the preferred date of commencement of the journal have been overwhelmingly in favor of its continuance from May 1, 1895, thus making the work continuous. The first current number will appear in January, 1896, and it will be continued monthly thereafter. The preceding bibliography, from May to December, will be printed in one number (perhaps divided into two parts) as quickly as the large quantity of material will permit."